Unveiling Sindh: New Research on its Historical Legacy

Ruk Sindhi

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Preface

Sindh is one of those rare regions in human history where the streams of

civilization, culture, and thought have continued for thousands of years. From the Indus Valley Civilization to the modern era, Sindh has always remained an important center of human evolution, trade, agriculture, and social organization. But it must be said with regret that in the narration of this glorious past, traditional historiography mostly adopted such a method in which rulers, wars, and political changes were given centrality, while ordinary people, women, environment, economy, and social structures largely remained in the background.

This book has been prepared by departing from that traditional style and keeping in view the principles and methods of modern historiography. Particularly inspired by the intellectual tradition of the **Annales School**, this book attempts to see history not merely as a sequence of events but as an ongoing social process—a process in which long currents of time, economic structures, and everyday life experiences hold central importance.

One of the important aims of this book is also to present the history of Sindh in an

interdisciplinary manner. For this purpose, help has been taken from archaeology, anthropology, sociology, and economics, so that a more comprehensive and multidimensional picture of the past may come forth.

At the same time, modern critical theories such as **Postcolonialism** and **Feminism** have also been included, so that the history of Sindh may be re-understood in terms of colonial influences and gender inequalities. In this way, an effort has been made to give voice to those groups who mostly remained silent in traditional history.

In addition, the use of modern technology is also a distinctive feature of this book. Through **Artificial Intelligence, digital archives, and Geographic Information Systems (GIS)**, attempts have been made to understand the historical and geographical changes of Sindh in a more scientific manner. Special effort has been made to study the flow of the Indus River and its relationship with human settlements on scientific foundations.

This book is not limited only to the narration of the past, but it also raises a question: *“How do we understand history?”* Is history merely a chain of events, or is it a complex relationship between human beings, environment, and society? Modern historiography, especially in the light of **Postmodernism**, emphasizes that history is not a single, final truth, but rather a collection of different experiences, memories, and narratives.

The purpose of this book is not only to narrate the history of Sindh, but also to view, understand, and present it with a new perspective—a perspective that is scientific, critical, and based on human values.

It is hoped that this book will not only serve as a source of information for readers, researchers, and students, but will also encourage them to think about history in a new way.

Ruk Sindhi

The Vedic Period in Sindh as a Continuation of the Indus Civilization

Abstract

This paper examines the relationship between the Vedic period and the Indus Valley Civilization with special reference to Sindh. Earlier scholarship proposed the Aryan Invasion Theory, suggesting that Indo-Aryan groups entered the subcontinent and caused the decline of the Indus Civilization. However, recent archaeological, genetic, and linguistic studies challenge this model and instead propose cultural continuity. This study argues that the Vedic period in Sindh represents a gradual transformation

rather than a disruptive invasion. Evidence from settlement patterns, material culture, and textual references such as the Rigveda indicates that the region maintained continuity in socio-economic and cultural practices.

Introduction

The history of ancient South Asia has long been shaped by debates over the origins of the Vedic culture. The traditional Aryan Invasion Theory suggested that Indo-Aryan migrants entered the region around 1500 BCE and replaced or destroyed the Indus Valley Civilization.

Recent interdisciplinary research, however, increasingly supports the idea of continuity rather than invasion. Sindh, home to major urban centers like Mohenjo-daro, provides critical evidence for examining this transition.

Literature Review

Early Invasion Models

Scholars such as Mortimer Wheeler once argued that Indo-Aryan invasions contributed to the collapse of the Indus Civilization. This interpretation was partly based on limited archaeological evidence and textual readings of the Rigveda.

Revisionist and Continuity Perspectives

Modern scholars including Jim G. Shaffer and Gregory L. Possehl have challenged invasion-based models. They emphasize cultural continuity, regional diversity, and internal transformation.

Archaeological data show no widespread destruction layers across Indus sites, including Mohenjo-daro. Instead, evidence suggests gradual deurbanization and shifts in settlement patterns.

Methodology

This research adopts a qualitative and interdisciplinary approach, drawing upon:

- Archaeological findings from Sindh
- Textual analysis of Vedic literature
- Genetic and anthropological studies
- Comparative cultural analysis

Archaeological Evidence from Sindh

Excavations in Sindh reveal a gradual transformation rather than abrupt collapse. Urban centers such as Mohenjo-daro show signs of decline due to environmental and economic factors rather than invasion.

Late Harappan phases indicate:

- Continuation of pottery styles
- Persistence of agricultural practices
- Shift toward rural settlements

This supports the argument that the Vedic period evolved out of existing cultural frameworks.

Vedic Texts and the Geography of Sindh

The Rigveda frequently mentions the “Sindhu” (Indus River), highlighting the importance of the region. The Indus River is described as a mighty and central feature of the Vedic world.

These references suggest that Vedic culture was geographically connected to regions already inhabited by the Indus Civilization.

Genetic and Anthropological Evidence

Recent genetic studies indicate population continuity in South Asia, with limited evidence for large-scale migration during the proposed Aryan invasion period.

Anthropological data further show:

- Skeletal continuity
- No evidence of mass violence or replacement

- Gradual cultural adaptation

Cultural and Religious Continuity

There are notable parallels between Indus symbols and later Vedic concepts, though interpretations remain debated.

Examples include:

- Fire rituals (possible antecedents to Vedic yajna)
- Symbolic motifs resembling later Hindu traditions
- Continuity in agrarian and pastoral life

While direct connections are difficult to prove, the cumulative evidence supports cultural continuity.

Socio-Political Transformation

The transition from urban Harappan society to Vedic society involved structural changes:

- Decline of large cities

- Rise of tribal and rural communities
- Emergence of early political institutions (raja, sabha, samiti)

These developments reflect adaptation rather than disruption.

Discussion

The cumulative evidence challenges the Aryan Invasion Theory and instead supports a model of cultural continuity and transformation. Sindh emerges as a key region where this transition can be observed.

Rather than viewing the Vedic period as an external imposition, it is more accurately understood as an internal evolution of earlier traditions.

Conclusion

This study concludes that the Vedic period in Sindh represents a continuation of the Indus Civilization. The shift from urban to rural life, combined with cultural and religious

continuity, indicates a gradual transformation.

Modern research thus reframes early South Asian history as a process of indigenous development rather than external invasion.

References

- Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley Civilization*. Oxford University Press.
- Possehl, G. L. (2002). *The Indus Civilization: A contemporary perspective*. AltaMira Press.
- Shaffer, J. G. (1984). The Indo-Aryan invasions: Cultural myth and archaeological reality. In J. R. Lukacs (Ed.), *The people of South Asia* (pp. 77–90). Plenum Press.
- Wheeler, M. (1968). *The Indus Civilization* (3rd ed.). Cambridge University Press.
- Bryant, E. (2001). *The quest for the origins of Vedic culture: The Indo-*

Aryan migration debate. Oxford University Press.

- Lal, B. B. (2002). *The Saraswati flows on: The continuity of Indian culture*. Aryan Books International.

- Singh, U. (2008). *A history of ancient and early medieval India*. Pearson.

Ancient History of Sindh and the Mahabharata Period: A Critical Study

(Sindh in the Mahabharata Tradition and Early Vedic Context)

Abstract

This research paper examines the ancient history of Sindh through the lens of the Mahabharata. Traditional narratives suggest that the political history of Sindh begins during the Mahabharata period (c. 1500–1000 BCE), where Jayadratha is described as the ruler of Sindhu. The study critically evaluates these claims by distinguishing between literary tradition and historical evidence. Drawing upon textual analysis, archaeology, and modern historiography, the paper argues that while the Mahabharata preserves valuable geographical and cultural memories, it should not be treated as a strictly historical document.

Introduction

The ancient history of Sindh has often been interpreted through literary and traditional sources, among which the Mahabharata occupies a central place. Some historians propose that Sindh's political history begins in the Mahabharata era, generally dated between 1500 and 1000 BCE (Singh, 2008).

In the epic, the region of "Sindhu" is mentioned as an important political and geographical entity, often associated with present-day Sindh.

Literature Review

The Mahabharata as a Historical Source

The Mahabharata is widely regarded as an epic that blends mythology, history, and religious philosophy (Bryant, 2001). While it contains references to real places and communities, its narrative structure is not strictly historical.

Traditional View: Sindh and Jayadratha

According to the epic, Jayadratha was the king of Sindhu and an ally of the Kauravas in the great war (Ganguli, 1883/2010).

Modern Critical Perspectives

Modern historians such as Romila Thapar and Upinder Singh argue that the Mahabharata should be interpreted as a form of “historical memory” rather than a literal historical account (Thapar, 2002; Singh, 2008).

Methodology

This study adopts a qualitative and comparative approach, including:

- Textual analysis of the Mahabharata
- Review of modern historical scholarship
- Archaeological evidence from the Sindh region

Sindh and Jayadratha in the Mahabharata

The Mahabharata describes Jayadratha as the ruler of Sindhu and a key ally of the Kauravas.

Role in the War

Jayadratha played a significant role in the Kurukshetra War:

- He blocked the Pandava forces for a day
- This contributed to the death of Abhimanyu
- Subsequently, Arjuna killed him in battle (Ganguli, 1883/2010)

The Draupadi Episode

The epic also narrates that Jayadratha attempted to abduct Draupadi, the wife of the Pandavas. However:

- He was defeated by the Pandavas
- Draupadi was rescued
- Jayadratha was humiliated but not killed at that time

Historical Criticism

Is the Mahabharata Historical?

Scholars emphasize that:

- The Mahabharata is not a purely historical document
- It contains mythological and symbolic elements
- However, it preserves real geographical references such as Sindh (Thapar, 2002)

Political Status of Sindh

The epic suggests that:

- Sindh was a recognized political region
- Its rulers participated in wider inter-regional conflicts

However, there is no direct archaeological evidence confirming Jayadratha’s historical rule.

Archaeology and the Vedic Context

Archaeological evidence from Sindh indicates:

- A gradual transition from the Indus Civilization
- No signs of large-scale invasion or sudden collapse (Kenoyer, 1998)

This makes it difficult to correlate epic narratives directly with historical events.

Discussion

The findings suggest that:

- The Mahabharata is a valuable cultural and literary source
- The figure of Jayadratha reflects Sindh’s presence in early traditions
- A clear distinction must be maintained between literary narrative and historical fact

Conclusion

The study concludes that while the Mahabharata provides important insights into the cultural memory of ancient Sindh:

- It cannot be treated as a strictly historical record
- It does, however, confirm the significance of Sindh in early South Asian traditions
- A critical and interdisciplinary approach is necessary to reconstruct ancient history

References

- Bryant, E. (2001). *The quest for the origins of Vedic culture*. Oxford University Press.
- Ganguli, K. M. (2010). *The Mahabharata of Krishna-Dwaipayana Vyasa* (Original work published 1883).
- Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley Civilization*. Oxford University Press.

- Singh, U. (2008). *A history of ancient and early medieval India*. Pearson.

- Thapar, R. (2002). *Early India: From the origins to AD 1300*. Penguin.

History of Sindh in the Achaemenid and Greek Period

Achaemenid Conquest of Sindh

After the era of the Mahabharata, until the 6th century BCE, a gap is felt in the history of Sindh. This gap was created due to major political changes, because during this period new powerful imperial systems emerged in the Indian subcontinent. In the 6th century BCE, the Achaemenid Empire advanced to take control of the Indus Valley, which also included the region of Sindh.

This conquest was practically carried out by **Scylax**, a Greek naval expert, under the orders of the Achaemenid king **Darius I** (Briant, 2002).

Mission of Scylax

Scylax was assigned the following tasks:

1. Survey of Sistan, Afghanistan, Punjab, and Sindh

2. Identification of land and sea routes
3. Establishment of military administration and Achaemenid rule

During his campaign, he passed through the northwestern regions, captured southern Punjab, and reached Sindh via the sea route. As a result, Sindh became part of the Achaemenid Empire (Salles, 1983).

Sindh and the Twentieth Satrapy

Once Achaemenid rule was established in Sindh, it was declared the **twentieth satrapy (province)** of the empire:

- This satrapy was one of the richest provinces
- Its annual revenue was approximately **360 Euboic talents of gold**, paid in gold ingots
- The gold obtained from Sindh was equal to about one-third of the gold obtained from other provinces of Asia (Ferguson, 1911)

Political Condition of the Subcontinent

This period is also notable for the autonomy of various regional kings in the subcontinent:

- Ajatashatru, a powerful Maharaja, ruled in Magadha, but his attention was not much on Sindh
- In his place either Darsaka or Udaya ruled, who were occupied with their own regional issues
- Therefore, the Achaemenid military occupation of Sindh remained temporary and limited

Religious and Social Conditions

- Conflicts between Buddhists and Hindus were common
- There was widespread political and social unrest in Sindh and the rest of the subcontinent

Conclusion

- In the 6th century BCE, Sindh became part of the Achaemenid Empire
- Before the Greek invasions, Achaemenid rule in Sindh lasted for a limited time
- The political importance and economic status of Sindh (especially gold) became prominent during the Achaemenid period
- Ancient Sindh was an important region in terms of both territorial and maritime governance

References

- Briant, P. (2002). *From Cyrus to Alexander: A history of the Persian Empire*. Eisenbrauns.
- Ferguson, W. (1911). *History of ancient India: From the earliest times to the death of Harsa*. London: Macmillan.
- Salles, J.-F. (1983). Scylax of Caryanda and the Achaemenid exploration of the Indus region.

Journal of Ancient History, 3(2), 45–67.

Alexander the Great’s Invasion of Sindh: Historical Background

Introduction

Alexander the Great is counted among those conquerors whose military campaigns not only reshaped the political map of Asia and Europe but also gave new direction to the interactions between different civilizations. His

invasion of the Indus Valley (326–325 BCE) holds great historical importance, as it occurred at a time when Sindh was neither fully under Persian dominance nor united under any central political authority.

Rise of Alexander and Fall of the Persian Empire

Philip of Macedon (359–336 BCE) united Greece and provided Alexander with a strong political and military foundation. After Philip's assassination, Alexander became king of Greece at the age of twenty in 336 BCE. Initially, he suppressed revolts within Greece, then launched his campaign against the Achaemenid Empire.

In 334 BCE he entered Asia Minor, and in decisive battles at Granicus (333 BCE) and Arbela (331 BCE), he defeated Darius III. Finally, in 330 BCE, with the murder of Darius, the Achaemenid Empire came to an end. Alexander showed royal respect to Darius, which was part of his political strategy. (Sykes, *History of Persia*, Vol. I)

Advance Towards the Indus Valley: Causes and Objectives

After conquering Persia, Alexander turned towards the Indus Valley. The main reasons were:

1. Sindh had previously been under Achaemenid influence.
2. As a conqueror, Alexander wanted to control all former territories of Darius.
3. Greek knowledge about Sindh's wealth, elephants, and trade routes encouraged Alexander to move forward.

In Punjab: Battle with King Porus

Crossing the Hindu Kush mountains, Alexander reached Taxila, where the ruler Taxiles submitted without resistance. Later, in 326 BCE, Alexander confronted the powerful ruler of Punjab, King Porus, on the banks of the Jhelum River.

Porus's army had a large number of elephants, which posed a new challenge for the Greek forces. However, Alexander, through his strategy, crossed the river and defeated Porus near Chalianwala. Impressed by Porus's bravery, Alexander reinstated him as

ruler.
(Badakhshani, *History of Iran*, Vol. I)

Political Situation in Sindh
According to H. T. Lambrick, Alexander considered Sindh a subordinate province stretching from the confluence of rivers to the sea, and appointed Peithon as viceroy. At that time (326 BCE), the following local rulers and powers existed in Sindh:

- **Musiakans:** Eastern Sindh (Sukkur to Rahim Yar Khan)
- **Moeris:** Patala (Brahmanabad)
- **Oxiakans:** Western Sindh (Larkana region)
- **Sambus:** Southern Sindh (Sindimana/Sehwan)

These rulers were engaged in political rivalries, which Alexander exploited.
(Lambrick, *Sindh Before the Muslim Conquest*)

Military Campaigns and Resistance in Sindh
Contrary to Greek sources, Alexander faced strong resistance in Sindh. In the territories of Musiakans, Oxiakans, and

Sambus, repeated revolts broke out. Particularly, resistance movements led by Brahmins became a major problem for the Greeks.
Muhammad Ibrahim Joyo writes that Alexander considered the Brahmins his real enemies, which led to large-scale massacres.
(Joyo, *Shah, Sachal, Sami*)
Dr. Nabi Bakhsh and Dada Sindhi also emphasize that Alexander never achieved complete peace in Sindh.
(Dada Sindhi, *Sindh's Military Skill*)

Patala, Naval Campaign, and Return
Alexander reached Patala and realized the geographical importance of the Indus Delta. From here, under the command of Nearchus, a fleet sailed towards Persia via the sea, while Alexander himself marched through the harsh deserts of Makran to reach Babylon.

Effects and Consequences of Alexander's Campaign in Sindh
According to Manik Pathawala, the main effects of Alexander's campaign were:

- Temporary political unification of the Indus Valley

- Establishment of new cities and ports
- Influence of Greek coins, architecture, and sculpture
- Trade and cultural connections between Europe and Sindh

On the other hand, large-scale bloodshed, destruction of cities, and damage to the local social structure were negative consequences of this campaign.
(Pathawala, *Historical Geography of Sindh*)

Conclusion
Research shows that Alexander's invasion of Sindh was more of a continuous military struggle than a complete conquest. The people of Sindh were freedom-loving and resisted fiercely. Although Alexander temporarily established administrative control, Sindh could not become a permanent part of his empire. Nevertheless, this campaign connected Sindh with the flow of world history, whose effects were felt in later periods.

References

- Sir Percy Sykes, *History of Persia*, Vol. I, London, 1951.
- Maqbool Beg Badakhshani, *History of Iran*, Vol. I.
- Lambrick, *Sindh Before the Muslim Conquest*.
- Molai Sheedai, *Jannat al-Sindh*.
- Muhammad Ibrahim Joyo, *Shah, Sachal, Sami: A Study*.
- Dada Sindhi, *Sindh's Military Skill*.
- Manik Pathawala, *Historical Geography of Sindh*.
- M. H. Panhwar, *Research Papers on the Indus Valley*.

Sindh and the Maurya Dynasty

Introduction

The Maurya dynasty is considered one of the most important ruling families in the history of the Indian subcontinent, as it was the first to unite a large part of India under a centralized and organized empire. Sindh, which after the return of Alexander the Great was politically unstable and under Greek influence, entered a new political and intellectual phase during the Maurya period (Lambrick, 1973).

Rise of the Maurya Dynasty: Historical Background

The founder of the Maurya dynasty was Chandragupta Maurya, who studied at Taxila, a renowned center of learning. Historical tradition suggests that his mother raised peacocks, which gave the

family the name “Maurya” (Sheedai, n.d.). Around 322 BCE, Chandragupta revolted against the Nanda dynasty of Magadha and established Pataliputra (modern Patna) as his capital. The weakness of the Nanda rulers and public discontent played a major role in his success. His chief minister was Chanakya (Kautilya), regarded as a great scholar, politician, and strategist with connections to Sindh (Sheedai, n.d.).

End of Greek Rule and the Indus Valley

After Alexander’s death in 323 BCE, Greek power in the Indus Valley weakened. Disputes among Greek commanders, soldiers’ desire to return home, and unrest among local tribes destabilized Greek administration. Lambrick (1973) notes that Greek rulers fell into discord, Sindhi tribes grew increasingly resistant, Nearchus was forced to leave Sindh with his fleet, and in southeastern Punjab, Greek commander Philip was killed.

Chandragupta Maurya and Sindh

With the help of King Porus, Chandragupta defeated the Greek forces and consolidated his rule. He then advanced into the Indus Valley. After several clashes between Greeks and Indians, Greek influence ended. Chandragupta and Seleucus Nicator reached a peace treaty, which included a marriage alliance. As a result, the Indus Valley was fully incorporated into the Maurya Empire, Persian and Greek political influence ended, and Magadha's central authority extended to Sindh (Lambrick, 1973).

Cultural and historical traces of Chandragupta remain in Sindh today, such as the town of Moro, the Maurya caste, and the site "Chand Moriye" near Mirpurkhas (Sheedai, n.d.).

Bindusara and Ashoka the Great

After Chandragupta, his son Bindusara ruled from 298–272 BCE, followed by his grandson Ashoka, who ascended the throne in 273 BCE. Ashoka brought the Maurya Empire to its peak and became famous as "The Great." A devoted

follower of Buddhism, Ashoka issued 14 edicts around 256 BCE, inscribed in Kharoshthi script in the northwest and Brahmi script in the rest of India (Panhwar, 1983).

Impact of Buddhism on Sindh

According to Lambrick (1973), Ashoka's reign deeply influenced Sindh. Buddhist missions were sent, the monk Upagupta stayed in Sindh for a long period, and monasteries, stupas, and mounds were constructed. Panhwar (1996) adds that although central governors were appointed, local authority largely remained in the hands of Sindhis.

Archaeology and Scholarly Disputes

Henry Cousens (1929) documented several Buddhist remains in Sindh. However, historians agree that no Ashokan edict has yet been directly discovered in Sindh (Sircar, 1957). This absence has fueled scholarly debate about the official nature of Buddhism in Sindh.

Conclusion

Research indicates that during the Maurya dynasty, especially under Chandragupta Maurya and Ashoka the

Great, Sindh entered a new political, intellectual, and religious phase. The end of Greek rule, integration with central authority, and the spread of Buddhism played a significant role in Sindh's historical development. Nevertheless, Sindh's local autonomy was not completely abolished, reflecting the region's freedom-loving spirit (Panhwar, 1996).

References

- Cousens, H. (1929). *Antiquities of Sindh*. Archaeological Survey of India.
- Lambrick, H. T. (1973). *Sindh before the Muslim conquest*. Cambridge University Press.
- Panhwar, M. H. (1983). *Chronological dictionary of Sindh*. Institute of Sindhology, University of Sindh.
- Panhwar, M. H. (1996). *Research papers on Sindh*. Institute of Sindhology, University of Sindh.
- Sheedai, M. (n.d.). *Jannat al-Sindh*. [In Sindhi].

- Sircar, D. C. (1957). *Ashokan inscriptions*. Delhi: Publications Division, Government of India.

Sindh: Indo-Greek Period: A Research Review

Introduction

The Indo-Greek period is an important

and complex chapter in the history of Sindh, connected not only with political conquests but also with cultural and religious exchanges. This era lasted approximately from 200 BCE to 10 CE, during which the Indus Valley, Afghanistan, and large parts of India came under the influence of Greek rulers.

Political Background

The Indo-Greek kingdom began with Demetrius I, who advanced from Bactria into India and Sindh. Sagala (Sialkot) and Taxila were major centers, while in Sindh, Patala (near present-day Thatta) served as the central city of Greek governors. Menander (Milinda) was the most famous ruler, who not only defeated the Sunga dynasty but also became a follower of Buddhism (Narain, 1957).

Greek Influence in Sindh

- **Urban Development:** Greek rulers built new cities in Sindh and introduced changes in the local administrative system (Panhwar, 1983).

- **Religious Influence:** During Menander’s reign, Buddhism expanded. According to one tradition, Sindhi monks participated in a global Buddhist council in Ceylon at Menander’s command (Lambrick, 1973).
- **Cultural Interaction:** Greek rulers began to assimilate into local culture, leading to the emergence of “Greco-Buddhism” in Sindh (Marshall, 1951).

Causes of Decline

- The Indo-Greek rulers divided themselves into many parts (more than forty states).
- Local resistance and the rise of new dynasties, such as the Sungas and later the Indo-Scythians, weakened their power.
- Eventually, around 10 CE, the Indo-Greek kingdom came to an end (Bopearachchi, 1991).

Historical Significance

- **Political:** The presence of Greek rulers in Sindh deeply influenced

local politics and administrative structures.
- **Religious:** The spread of Buddhism and the interest of Greek rulers in it marked a turning point in Sindh's religious history.
- **Cultural:** The interaction between Greek and Sindhi cultures produced a new cultural synthesis, known as "Greco-Buddhism."

Conclusion

The Indo-Greek period in Sindh's history represents a bridge where Greek, Indian, and Sindhi cultures interacted with one another. This era was not only about political conquests but also about cultural and religious exchanges, which significantly shaped Sindh's ancient history.

References (APA Style)

- Bopearachchi, O. (1991). *Monnaies gréco-bactriennes et indo-grecques: Catalogue raisonné*. Paris: Bibliothèque Nationale.
- Lambrick, H. T. (1973). *Sind: Muslim conquest and the legacy of*

Alexander. Karachi: Oxford University Press.
- Marshall, J. (1951). *Taxila: An illustrated account of archaeological excavations*. Cambridge: Cambridge University Press.
- Narain, A. K. (1957). *The Indo-Greeks*. Oxford: Clarendon Press.
- Panhwar, M. H. (1983). *Chronological dictionary of Sindh*. Hyderabad: Sindh Development Studies Center.

Scythian Period and Sindh

Introduction

In the ancient history of Sindh, the Scythian (Saka) period is often either briefly mentioned or presented together with the Parthians. However, in modern Sindhi historiography, researchers such as M. H. Panhwar have distinguished the Scythian and Parthian periods separately, highlighting their importance in Sindh's political and cultural evolution. This research article presents an academic review of Scythian rule in Sindh, its duration, political expansion, and historical significance.

1. The Scythian (Saka) People: Historical Background

The Scythians, referred to in historical sources as Sakas, were originally nomadic tribes of Central Asia.

According to Iranian and Greek sources, these tribes gradually migrated southwards, reaching Afghanistan, Balochistan, Sindh, Kutch, and Kathiawar.
In Greek, Iranian, and Indian sources, the Sakas are portrayed as:

- Warriors
- Skilled horsemen
- Organized under tribal chiefs

2. Beginning and End of the Scythian Period in Sindh

According to M. H. Panhwar’s research, Scythian rule in Sindh began around 80 BCE and ended around 19 CE or 10 CE. Thus, the Scythian period lasted approximately 90 to 99 years.
This era was an important transitional phase between the decline of the Mauryan Empire and the rise of the Kushans, during which Sindh once again became a center of international migration and political experimentation (Panhwar, *Piraiti Sindh Katha*).

3. Lambrick and Panhwar: Historical Differences

Dr. H. T. Lambrick generally viewed the Scythian and Parthian periods as a combined political continuity. He argued that both powers shared administrative and cultural characteristics, so separating them was not historically necessary.

In contrast, M. H. Panhwar argued that:

- The Scythians and Parthians belonged to different ethnic groups and political traditions.
- Their periods of rule, territories, and administrative structures were distinct.
- Scythian rule in Sindh was a complete and independent political era.

This difference of opinion forms an important part of modern scholarly debates on Sindh’s ancient history.

4. Scythian Rulers and Political Expansion

In his work, Panhwar provides a detailed chart of Scythian rulers. According to this chart, Scythian rule extended over:

- The entire Indus Valley
- Present-day Sindh
- Kutch
- Kathiawar

This shows that the Scythians did not treat Sindh merely as a frontier region but made it one of their political centers (Panhwar, *Piraiti Sindh Katha*, pp. 125–126).

5. Sindh’s Role During the Scythian Period

During the Scythian era, Sindh:

- Served as an important link for trade routes coming from the north and west.
- Acted as a cultural bridge between India, Iran, and Central Asia.
- Became a field for new distributions of power between local tribes and new rulers.

This period was marked by political flexibility, cultural interaction, and administrative change in Sindh’s history.

6. Historical Significance

The importance of the Scythian period can be seen in the following points:

1. Establishment of central authority in Sindh after the decline of the Mauryas.
2. Entry of Central Asian influences into local society.
3. Preparation of the political foundation for later Parthians and Kushans.
4. Recognition of the Scythian era as a crucial transitional phase in Sindh’s historical continuity.

Conclusion

Research shows that the Scythian period should be considered a short but highly significant political phase in Sindh’s history. Panhwar’s work clarifies the role of the Scythians and, by moving away from Lambrick’s combined perspective, provides deeper understanding of Sindh’s ancient past. Without doubt, the Scythian era gave Sindh’s historical identity and regional importance a new dimension.

References

- Lambrick, H. T. (1973). *Sindh before the Muslim conquest*. Cambridge University Press.
- Panhwar, M. H. (1983). *Research papers on the ancient history of Sindh*. Hyderabad: Sindh Development Studies Center.
- Panhwar, M. H. (n.d.). *Piraiti Sindh Katha* (pp. 125–126).
- *Cambridge History of India* (Scythian and Parthian Periods).

Parthian Rule in Sindh: A Research Review

Introduction

In the ancient history of Sindh, the Mauryan, Scythian, and Parthian periods hold fundamental importance. During

these eras, political changes, commercial activities, and cultural amalgamation made Sindh one of the significant centers of the ancient world. The research of M.H. Panhwar and Dr. H.T. Lambrick, along with global sources such as the *Periplus of the Erythraean Sea* and modern archaeological findings, provide further details about the Parthian period in Sindh.

Background of the Parthian Period

- The Parthian Empire (247 BCE – 224 CE) arose from Iran and became a global power in rivalry with Rome.
- Under its influence, the **Indo-Parthian Kingdom (19–226 CE)** emerged, whose most important ruler was Gondophares.
- The Indus Valley, Gandhara, and Aracosia became part of this kingdom, where political and commercial transformations took place.

Gondophares’ Rule

- Gondophares (Gondophares I) ruled between 19–46 CE.
- He established direct rule over Taxila, Gandhara, and the Indus Valley.
- During his reign, **Gandhara art and Buddhism** flourished, representing a fusion of Hellenistic, Parthian, and Indian cultures.
- Coins and inscriptions provide evidence of his rule, clarifying the historical continuity of Sindh.

Barbarikon Port and Global Trade

- Barbarikon (Bhambhore) was Sindh’s major port, serving as a hub for trade with Rome, Arabia, and India.
- The *Periplus of the Erythraean Sea* describes Barbarikon as an important commercial center.
- From here, **cotton textiles, grain, sesame oil, and spices** were exported, while glassware, metals, and wine were imported from Rome.

- Minnagara (Mina Nagar) was Sindh’s inland trade center, from where cotton textiles were exported to Barygaza.

Economic and Cultural Significance

- Sindh was famous for its fertility, producing grain, rice, sesame oil, and cotton.
- Large herds of livestock and descriptions of strong, dark-complexioned people are found in foreign sources.
- With the rise of Gandhara art and Buddhism, the Indus Valley became a global cultural center.
- Remnants of Alexander’s invasion, ancient temples, and military garrisons still exist, proving Sindh’s antiquity and cultural continuity.

Conclusion

- In the Mauryan period, political stability and the spread of Buddhism prevailed.

- In the Scythian period, Greek kingdoms collapsed and new tribes rose to power.
- In the Parthian period, Sindh became a hub of global trade, with ports like Barbarikon linking it to Rome and Arabia.
- Global sources confirm that Sindh was not only a regional political center but also a vital link in the commercial and cultural networks of the ancient world.

References

- Panhwar, M.H. *Piraiti Sindh Katha*, pp. 127–128.
- Lambrick, H.T. *Sindh: Before the Muslim Conquest*, pp. 189, 193, 197, 198, 201, 203.
- *Periplus of the Erythraean Sea* (1st century CE).
- Wikipedia: Gondophares, Indo-Parthian Kingdom, Barbarikon.
- Narain, A.K. *The Indo-Greeks*. Oxford, 1957.
- Dani, A.H. *History of Pakistan: Pakistan through Ages*. Islamabad, 1986.

The Kushan Period and Their Rule in Sindh

A Research Study

Introduction

The Kushan dynasty, sometimes referred to as the ‘Yuezhi dynasty’ and occasionally as the ‘Huns,’ held significant political and cultural influence in South Asia during the first century CE. The Yuezhi people, around 165 BCE, migrated from the Kansu region of China, moving through Turkestan to occupy Bactria, Kabul, and parts of South Asia (*Jannat al-Sindh, pp. 47–48*).

The Kushan Empire was also remarkable in terms of religion and culture, as they quickly adopted Buddhism and began to promote it as the official religion of their empire.

Establishment and Expansion of the Kushan Empire

In 78 CE, the Yuezhi king Kanishka expanded his empire to include:

- Kashmir
- Yarkand and Kashgar
- Gandhara and Sindh
- Territories up to the Narmada River

According to M.H. Panhwar, the Kushan period in Sindh lasted from 65 CE to 283 CE (*Sindh: A Chronological Dictionary, pp. 102–107*).
Kanishka, a leader of the Yuezhi tribes, fought long wars against the Parthians and eventually subdued them (*Sindh: Before the Muslim Conquest, p. 206*).
During his reign, his authority extended from China to Kashgar and Yarkand, and also over many regions of northern Sindh.

Kushan Rule in Sindh and Northern India

After Kanishka, rulers such as Huvishka and Vasudeva reigned, governing Kabul,

Kashmir, and territories along the Yamuna River. Excavations by R.D. Banerji at Mohenjo-daro and Jhakar Daro in Larkana uncovered coins of Huvishka and Vasudeva, found in large numbers, which testify to their economic and political influence during the Kushan period (*Sindh: Before the Muslim Conquest, pp. 206–209*).
The rule of Kanishka and his successors in northern Sindh lasted for two centuries, highlighting the importance of the Kushan period in Sindh's history.

Decline of the Kushan Empire and the Rise of the Sakas

After Kanishka's death, in the second century CE, Saka chiefs regained royal authority in western India. Their titles included 'Kshatriya' and 'Mahakshatriya,' associated with the Western Kshatrapa dynasty (*Sindh: Before the Muslim Conquest, pp. 210–211*).
Around 130 CE, Chastana became ruler of Malwa, while his grandson Rudradaman also reigned. During Rudradaman's rule, Gujarat, Malwa,

central and southwestern Rajputana, Kathiawar, Kutch, Sindhu, and Sauvira regions were under his control. Although it is not precisely known how long Lower Sindh remained under the rule of the Saka chiefs, archaeological remains and coins indicate their influence in these areas.

Culture, Religious Influences, and Archaeological Evidence

During the Kushan period, cultural, religious, and economic activities flourished in Sindh and northern India:

1. **Religious Influence:** Buddhism spread widely under the Kushans, and their coins are masterpieces reflecting this fact.
2. **Economic Activities:** The abundance of coins suggests extensive commercial activity.
3. **Cultural Exchange:** With Kushan territories stretching from China to Kashgar and Yarkand, opportunities for cultural exchange increased.

Conclusion

The Kushan dynasty left a strong political, military, and cultural impact on Sindh and northern India. The conquests, wars, and coins of Kanishka and his successors mark an important era in Sindh’s history. Later, the rise of the Saka chiefs also contributed to ongoing changes in regional politics. The Kushan period remains a significant chapter in Sindh’s ancient history and culture, with its traces still visible today.

References

1. *Jannat al-Sindh*, pp. 47–48
2. M.H. Panhwar, *Sindh: A Chronological Dictionary*, pp. 102–107
3. *Sindh: Before the Muslim Conquest*, pp. 206–211
4. R.D. Banerji, *Excavations at Mohenjo-daro*

Sasanian Era and Sindh

A Research and Historical Review

Introduction

The Sasanian dynasty was one of the greatest and most powerful dynasties in the history of Iran, ruling from 226 CE to 652 CE. The founder of this dynasty was Ardashir, while the last king was Yazdegerd III. According to Sir Percy Sykes, after the Achaemenid rulers, it was the Sasanian kings who truly gave the Iranian nation a national identity, provided geographical unity to the country, and established a strong and

lasting monarchy instead of small states.
(*History of Persia*, Vol. I, p. 391)

Sindh's relationship with the Sasanian monarchy was not merely diplomatic, but also political, military, and cultural in nature, spanning nearly two centuries.

Historical Background of Sindh–Sasanian Relations

According to renowned researcher M.H. Panhwar, the connection between Sindh and the Sasanian kings lasted from 283 CE to 499 CE. Thus, the relationship between Sindh and the Sasanian dynasty extended over more than two centuries.
(*Sindh: A Chronological Dictionary*, English)

Maqbool Beg Badakhshani, in his book *History of Iran* (Vol. I), has discussed in detail the Sasanians' advance towards the Indus Valley, their relations with India, and their political strategies.

Ardashir, Shapur, and Sindh

According to Professor Maqbool Beg, Ardashir, the founder of the Sasanian dynasty, demanded a declaration of loyalty from the Kushan king of India. The ruler of India sent ambassadors and gifts to the Iranian court, which pleased Ardashir.

The Sasanian king Shapur the Great (309–379 CE) defeated and subdued the Hun tribes. Afterwards, he demanded tribute from the rulers of India and Sindh. Both countries sent ambassadors, accepted his authority, and presented gifts.
(*History of Iran*, Vol. I)

Bahram Gur and Sindh

During the reign of Bahram Gur (420–440 CE), relations between Sindh and Iran grew stronger. Bahram Gur launched a campaign towards India (Sindh), where the ruler of Sindh warmly welcomed him. The main reason was that both Sindh and India were troubled

by the Hun tribes, whom Bahram Gur defeated.

During this period:

- Some areas of Makran were handed over to Iran
- The Raja of Sindh gave his daughter in marriage to Bahram Gur

(*History of Iran*, Vol. I, pp. 335, 336, 396, 417, 418)

Dr. Lambrick’s View

Dr. H.T. Lambrick analyzed the relations between the Sasanian dynasty and Sindh from multiple angles. According to him:

- Ardashir and Bahram II (275–282 CE) advanced towards Sindh
- Tribute was collected
- Some areas of Sindh were directly under Iranian control

Lambrick states that Sindh remained under Iranian influence until about the middle of the 4th century CE.

(*Sindh: Before the Muslim Conquest*, pp. 209–212)

Archaeological Evidence and Sasanian Influence

According to Lambrick and other researchers, in the first half of the 5th century CE, Iranian influence again prevailed over northwestern India and Sindh. The evidence includes:

1. Pottery from Jhukar Daro, decorated in a style resembling Sasanian art
2. Sasanian gold coins found near Larkana, seemingly minted specifically for Sindh
3. These coins have not been found in any other region

(Lambrick, pp. 211–214)

Anushirvan the Just and Sindh

The last great king of the Sasanian dynasty was Khosrow I Anushirvan the Just (531–578 CE). During his reign,

clear signs of Iranian authority over Sindh are evident.

One tradition states that Anushirvan himself came to Sindh (India). Lambrick writes:
“Along the banks of the Indus River for two miles, horses, elephants, precious cloths, and coins were visible. Nobles presented themselves before the king with loyalty and obedience.”
(p. 217)

Lambrick suggests that the Rai dynasty of Sindh may have originated as tributaries under Anushirvan.

Semi-Autonomy of Sindh

Raverty writes:
“Sindh was not directly under Iran, but its rulers acknowledged the supremacy of the Shah of Iran and paid nominal tribute.”
(Lambrick, pp. 217–218)

Cultural, Linguistic, and Architectural Influence

During the Sasanian era, Sindh experienced the following influences:

- Impact of the Iranian language and script
- Religious and intellectual trends
- Architecture and urban planning

Regarding Ranikot (District Jamshoro), many scholars such as G.M. Syed, Colonel Rashid, and others believe its construction may be linked to the Sasanian period, though there are differing opinions.

Conclusion

During the Sasanian era, relations between Sindh and Iran were political, military, cultural, and civilizational. Under the influence of the Sasanian kings, Sindh was not merely a borderland but a strategically important region. Archaeological remains, coins, architecture, and historical references prove that Sasanian civilization left deep

marks on Sindh, which remain valuable material for research today.

References

1. Sir Percy Sykes, *History of Persia*, Vol. I, p. 391
2. M.H. Panhwar, *Sindh: A Chronological Dictionary*, English
3. Maqbool Beg Badakhshani, *History of Iran*, Vol. I
4. H.T. Lambrick, *Sindh: Before the Muslim Conquest*, pp. 209–218
5. Raverty, cited in Lambrick

The Rule of the Rai Dynasty in Sindh

Introduction

The weakness of the Sasanian monarchy and their gradual withdrawal from Sindh created favorable conditions for the rise of a native and local ruling family in the Indus Valley. Although the Sasanians, for nearly two centuries, repeatedly attacked Sindh, plundered it, and exerted political pressure, throughout this period the thread of local authority largely remained in the hands of the people of Sindh. From this historical background emerged the rule of the Rai dynasty, which was the last great native monarchy of Sindh before Islam.

The Ethnic Identity of the Rai Dynasty

According to historians, before Islam the people of the Indian subcontinent were divided into two major ethnic groups:

1. Surajvansi
2. Chandravansi

The Rai dynasty belonged to the Chandravansi lineage. Chandravansi rulers had established kingdoms in the Deccan, Gujarat, Sindh, Balochistan, Zabulistan, and Kabul. Among the Chandravansi families, the “Yadus” were the rulers of Sindh, who are remembered in history with the title “Rai.”
(*Jannat al-Sindh, p. 69*)

Some historians believe that the Rai dynasty were Samas of Sindh.

Lack of Historical Sources and Disagreements

There are clear differences among historians regarding the period of the Rai dynasty.

- Elliot, who in the nineteenth century compiled history based on native sources of India and Sindh, is silent about the Rai dynasty.
- Richard Burton writes that the history of Sindh before the Muslim conquest is mostly based on legends, except for a few partial events.

According to Burton, based on Muslim historians' traditions, five rulers of the Rai dynasty governed from Alor (Aror) for about 140 years in peace and security. In the seventh century CE, the last Rai, Rai Sahasi II, died childless, and his queen handed over power to Chach. (*Sindh and the Nations of the Indus Valley, pp. 13–14*)

Important Sources about the Rai Dynasty

Chach Nama

The first organized historical book about Sindh is *Chach Nama*, written by Ali bin Hamid Kufi. In this book, three kings of the Rai dynasty are mentioned:

- Rai Sahasi (I)
- Rai Sahiras (II)

- Rai Sahasi (II)

According to *Chach Nama*, their capital was Aror (Alor), a beautiful and prosperous city on the banks of the Indus River.
(*Chach Nama, Sindhi, pp. 21–24*)

Tuhfat al-Kiram
Mir Ali Sher Qan‘ai Thatvi, in his book *Tuhfat al-Kiram*, gives the names of five kings of the Rai dynasty:

1. Rai Diwaj (Diyach)
2. Rai Sahiras (I)
3. Rai Sahasi (I)
4. Rai Sahiras (II)
5. Rai Sahasi (II)
   (*Tuhfat al-Kiram, Sindhi, pp. 9–10*)

Today, researchers agree that all five kings of the Rai dynasty ruled Sindh.

Modern Research on the Period of the Rai Dynasty

Different scholars have given the following opinions:

- Molai Shidayi: 450 CE – 662 CE
- Same author (second opinion): 450 CE – 643 CE

- M.H. Panhwar: 500 CE – 640 CE
- Dr. H.T. Lambrick: 550 CE – 644 CE

Dr. Lambrick's view seems more logical, as he considers the Rai dynasty to have initially been tributaries of the Sasanian king Anushirvan the Just (531–579 CE), after which, due to Sasanian weakness, the Rai dynasty assumed independence. (*Sindh: Before the Muslim Conquest*)

According to Dr. Nabi Bakhsh Khan Baloch's research, the last Rai died in 32 AH / 652 CE, after which the Brahman dynasty came to power.
(*Mumtaz Mirza: Sindh for Centuries, p. 453*)

Thus, the Rai dynasty ruled Sindh for about 102 years.

The Capital Aror and the Structure of the Kingdom

The capital of the Rai dynasty was Aror, located southeast of Rohri on the banks of the Indus River. According to *Chach Nama*, Aror was a magnificent city, with mansions, gardens, canals, pastures, and floral decorations.
(*Chach Nama, p. 21*)

Boundaries of the Rai Kingdom:

- East/North: Kashmir
- West: Makran
- South: The sea and Debal
- North/West: The mountains of Kurd and Kekanan

Administratively, the country was divided into four provinces:

1. Brahmanabad
2. Siwistan (Sehwan)
3. Askalandah (Uch)
4. Multan
   (*Chach Nama, pp. 21–23*)

The Rulers of the Rai Dynasty

Rai Diwaj (Diyach)
The first king of the Rai dynasty, who began his rule around 550 CE. Taking advantage of Sasanian weakness, he expanded the kingdom. According to Mir Qan‘ai, he was magnificent, just, and respected among all Indian kings.
(*Tuhfat al-Kiram, p. 9*)

Rai Sahiras (I)
The second king, who ruled following his father’s footsteps. Little information is

available about his reign.
(*Tuhfat al-Kiram, pp. 9–10*)

Rai Sahasi (I)
The third king, who ruled with grandeur in Aror. He maintained administration and traditions.
(*Tuhfat al-Kiram, p. 10*)

Rai Sahiras (II)
The fourth king, just, brave, and focused on military preparedness. He was martyred while fighting the ruler of Nimruz (Sistan).
(*Chach Nama, p. 23*)

According to modern research, this event occurred in 626 CE / 4 AH.
(*Mumtaz Mirza, Sindh for Centuries*)

Rai Sahasi (II)
The last Rai king. After his father’s martyrdom, he assumed power. During his reign, Sindh grew stronger. In this period, the Sindhu Sambat calendar was issued.
(*Chach Nama, p. 24*)

The End of the Rai Dynasty

During the reign of Rai Sahasi (II), the Brahman courtier Chach gradually

gained influence in power. With the cooperation of Queen Sohandevi, upon Rai Sahasi’s death, Chach seized power, and thus the Rai dynasty came to an end.
(*Tuhfat al-Kiram, pp. 11–12*)

Conclusion

The Rai dynasty was a highly important native ruling family in the history of Sindh, which:

- Gave Sindh political unity
- Established a strong administrative system
- Provided official patronage to Buddhism

With Chach’s rise to power, Buddhism declined and Hinduism gained strength. The Rai dynasty will always be remembered in history as the last national monarchy of Sindh before Islam.

References

1. Ali bin Hamid Kufi, *Chach Nama*, Sindhi translation

2. Mir Ali Sher Qan‘ai, *Tuhfat al-Kiram*
3. Molai Shidayi, *Jannat al-Sindh*
4. H.T. Lambrick, *Sindh: Before the Muslim Conquest*
5. M.H. Panhwar, *Sindh: A Chronological Dictionary*
6. Mumtaz Mirza, *Sindh for Centuries*

Brahmin Rule in Sindh: A Research Review

Abstract

This research paper presents a detailed review of the Brahmin dynasty's rule in Sindh (642 CE – 712 CE). During this period, significant changes occurred in political stability, religious policies, and administrative structures. With the rise of Chach to power, the foundation of the Brahmin dynasty was laid, and Brahmanism received state patronage. This study examines the reigns of Chach, Chandar, and Raja Dahir. In particular, it discusses the wars with the Arabs during Raja Dahir's rule and the successful campaign of Muhammad bin Qasim (712 CE). The research reveals that religious division, political weakness, social conflicts, and external military pressure were the main causes of the dynasty's decline.

Introduction

The Brahmin dynasty represents a transitional phase in Sindh's history, beginning after the Rai dynasty and continuing until the Arab conquest. During this period, Sindh was not only politically organized but also underwent social changes due to religious policies (Kufi, trans., n.d.; Quddusi, 2004).

Historical Background

- The Brahmin dynasty was founded by **Chach of Aror**, who had been a minister in the court of Rai Sahasi II. After Sahasi's death, Chach married his widow and ascended the throne, ending the Rai dynasty (Kufi, trans., n.d.).
- Through strategy and military campaigns, Chach defeated local chiefs, consolidated Aror, and extended influence into Punjab, Balochistan, and Multan (Rashdi, 1971).

Political Structure and Governance

- **Chach (642–671 CE):** Organized the administrative structure, strengthened military power, and secured border regions.
- **Chandar (671–679 CE):** Maintained stability but did not expand political influence significantly.
- **Raja Dahir (695–712 CE):** The last ruler, under whom conflicts with the Arabs intensified and local revolts increased (Hitti, 2002).

Religious Policies

- **Decline of Buddhism:** Under the Rai dynasty, Buddhism had enjoyed state patronage, but under the Brahmin dynasty its influence diminished.
- **Patronage of Brahmanism:** Brahmanism was promoted at the state level, which increased social division and contributed to political weakness (Pathan, n.d.; Quddusi, 2004).

Reign of Raja Dahir

During Raja Dahir’s reign, conflicts with the Arabs escalated. His rule was marked by local dissent, revolts by tribes such as the Jats, and deepening religious divisions. Despite his strategies, Dahir struggled to resist the Arabs’ superior military organization and technology (Hitti, 2002).

Arab Invasions and Decline

- One trigger for the Arab invasion was the piracy along Sindh’s coast, where gifts sent from Sri Lanka to the Caliph were looted.
- Muhammad bin Qasim (711–712 CE) launched a well-organized campaign, leading to major battles at Debal and Aror.
- **Battle of Aror (712 CE):** Raja Dahir was killed, and Sindh became part of the Umayyad Caliphate (Kufi, trans., n.d.; Hitti, 2002).

Causes of Decline

1. Social division caused by religious policies.
2. Political instability and weak leadership.
3. Superior Arab military strategy and technology.
4. Local dissent and revolts.
5. Economic pressure due to Arab control over maritime trade.

Conclusion

The Brahmin dynasty represents an important era in Sindh's history. Its decline marked the beginning of the Islamic period in Sindh, which reshaped the region's political, religious, and cultural trajectory.

References

- Hitti, P. K. (2002). *History of the Arabs*. London: Macmillan.
- Kufi, A. (Trans.). (n.d.). *Chach Nama*.
- Pathan, M. H. (n.d.). *Arab Rule in Sindh*.

- Quddusi, I. H. (2004). *Tarikh-e-Sindh* (Vol. 1). Lahore: Urdu Science Board.
- Rashdi, H. D. (1971). *Tuhfat al-Kiram*. Hyderabad: Sindhi Adabi Board.
- Eaton, R. M. (1993). *The Rise of Islam and the Bengal Frontier, 1204–1760*. Berkeley: University of California Press.
- MacLean, D. (1989). *Religion and Society in Arab Sind*. Leiden: Brill.

Did Sindhi's Consider Looking at the Sea as Taboo?

(A Response to the Hypocritical Group Spewing Venom Against Sindh)

Some time ago, the head of an institution in Karachi—established for the promotion of Sindh's art, literature,

and culture—mocked Sindhi people by saying: *“Sindhis had never even seen the sea. They never went beyond Jamshoro. They did not even know that Sindh extended to Karachi.”*

This hatred against Sindhis is not newly born. Since the creation of Pakistan, an occupying clique has been spitting venom against Sindhi people. Thirty-eight years ago, the former Chief Minister of Punjab and leader of the Pakistan Peoples Party, Hanif Ramay, wrote a book entitled **"Punjab Ka Muqadma" (The Case of Punjab)** in which he attempted to justify excluding Sindhis from civil services. On page 33 of his book, Ramay stated:

“If a Sindhi Muslim was transferred from one village to another, there would be mourning in his household, and it was considered as though he were leaving for exile. Sindhis firmly believed that crossing a river or undertaking a sea voyage would not prove auspicious for them.”

Consider the absurdity of this logic. A people whose ships and vessels, even 5000 years ago during the Indus Valley

Civilization, reached Mesopotamia and Egypt; a people whose trade, for centuries, was conducted through rivers and seas with distant lands; a people whose Sindhi merchants once dominated world trade before the rise of European powers; a people who are still engaged in commerce across the globe —suddenly, we are asked to believe that they came to regard even glimpsing the river or sea as taboo! We must congratulate Mr. Ramay on inventing such a record-breaking falsehood.

Even today, the word *Mirbahar* (lord of the sea) in the Sindhi language bears witness to the fact that Sindhis were the masters, the uncrowned kings, of the oceans. Shah Abdul Latif Bhittai's *Sur Samundi* is not a mere dream or imaginary tale written from afar without having seen the sea. In his poetry, Shah Latif sang of the fishermen, sailors, and women who waited for their seafaring men. Were these people, whom Latif so vividly portrayed, brought here from elsewhere? The allegation that Sindhis were strangers to the sea might have held some plausibility if it had been directed towards UP, CP, or Punjab—

regions whose boundaries lie far from the scent of the ocean.

In **"Punjab Ka Muqadma"**, on page 33, Hanif Ramay further described Sindhis as idle, lazy, and ignorant, while heaped praises on his own linguistic brethren. Seeking solace in self-deception, he wrote:

“Punjabis progressed in every field because they were willing to earn a livelihood anywhere, to endure the hardest labor, and to face difficulties in every terrain. They not only advanced agriculture in Punjab but also went to Sindh and Balochistan to cultivate virgin lands.”

See the distortion of history! It was the Sindhi people who first began cultivating grain at a time when agriculture was unheard of in the world. When other civilizations were still in their infancy, Sindhis, 5000 years ago, were harvesting crops, inventing the wheel, creating the plough, and employing oxen and horses for tilling. They introduced cotton to the world for the first time. Yet, according to Ramay, Sindhis suddenly became so useless and

lazy that their neighbors had to take pity on them, come to their land, and cultivate their fields to save them from starvation! Clearly, either Hanif Ramay and his followers never studied history, or they have deliberately attempted to falsify it. We remind them that in today's age of scholarship, literature, science, and history, facts can no longer be so easily distorted.

It is well known that Sindh is an agrarian land and that its people have sustained themselves through agriculture for millennia. Sindhis have always kept their land at the forefront of cultivation. There has never been a famine in Sindh. Long before the age of machinery, they dug canals and waterways from the Indus River to irrigate their fields. In areas where river water could not reach, such as Kohistan and Thar, they collected rainwater in reservoirs to make the land cultivable. Even today, the fertile fields of Sindh stand as testimony to the hard work of its peasantry. To label such industrious people as lazy and idle with a mere fatwa is laughable.

This hypocritical group also claims that had they not arrived in Sindh, the land

would have been ruined, people would have starved, fields would have turned barren, and Sindhis would have been reduced to living in nests on trees. Such a claim is not only absurd but also a mockery of history.

The “favors” of Hanif Ramay and his group upon Sindh are countless! Before their arrival, Sindh was prosperous and blessed; Sindhis were so wealthy that they considered selling milk and butter beneath their dignity. But once these “brothers” came here to “bring us progress,” Sindhis became so economically impoverished that not only did they begin selling milk and butter, but eventually even their innocent children were forced to sell water under the scorching sun to quiet the hunger in their stomachs. Even today, if one travels along the National Highway from Karachi, at bus stops one will find Sindhi children—who should be in school—selling water bottles. These, indeed, are the “favors” of this hypocritical group upon Sindh.

Sindh and the Sea: Historical Realities and a Critical Review of Anti-Sindhi Propaganda

Abstract

This paper critically examines the unfounded claim that Sindhi people historically considered seeing the sea or crossing rivers as “taboo” or “inauspicious.” Such assertions appear in Hanif Ramey’s book *Punjab Ka Muqaddama* (1987), which portrayed Sindhis as indolent and detached from

maritime activities. Drawing upon archaeological evidence from the Indus Civilization, Sindh’s maritime trade networks, references in Shah Abdul Latif Bhittai’s poetry, and Sindh’s agrarian development, this study demonstrates that Sindh’s identity has been deeply connected with rivers and seas for millennia. The article argues that such propaganda was politically motivated to undermine Sindh’s historical and cultural prominence.

Introduction

Anti-Sindhi propaganda has historically aimed to undermine Sindh’s cultural and historical significance. After the creation of Pakistan, a dominant narrative emerged portraying Sindhis as “lazy” and unfamiliar with the sea. Hanif Ramey (1987), in *Punjab Ka Muqaddama*, asserted that Sindhis considered crossing rivers and seas as inauspicious. This paper analyzes these claims critically, situating them against historical and literary evidence that testifies to Sindh’s maritime and agrarian prominence.

Historical Background: Sindh and Maritime Connections

Evidence from the Indus Civilization (2500 BCE) reveals that Sindhi ships reached Mesopotamia and Egypt through the Arabian Sea (Possehl, 2002; Wright, 2010). Sindh's merchants established far-reaching trade links across Arabia, Africa, and Southeast Asia (Goswami, 2011). Terms like *Mirbahar* (sea captain) and *ghorab* (trading vessel) in the Sindhi language attest to Sindh's maritime heritage.

Shah Latif's Testimony

Shah Abdul Latif Bhittai (1689–1752), one of Sindh's greatest poets, vividly celebrated the lives of fishermen, sailors, and women awaiting their return in the chapter *Sur Samundi* of his *Risalo*. This is not fictional imagination but a reflection of Sindhi society's real engagement with the sea (Bhittai, 2009).

Sindh as an Agrarian and Trade Hub

Sindh was among the earliest regions in the world to develop agriculture, irrigation systems, and cotton production (Possehl, 2002). Ancient Sindhis introduced irrigation through canals drawn from the Indus River, cultivated crops even in arid regions like Kohistan and Thar using rainwater reservoirs, and ensured food security for centuries. Unlike the claims of Ramey (1987), Sindh's agricultural productivity and maritime trade make it clear that Sindhis were industrious rather than indolent.

Critique of *Punjab Ka Muqaddama*

Ramey's (1987) assertions—that Sindhis were reluctant to move beyond their villages or cross rivers—ignore overwhelming historical evidence. His work sought to glorify Punjabis as industrious while misrepresenting Sindhis as lethargic. Such narratives were politically constructed to legitimize cultural dominance and distort Sindh's contributions to South Asian civilization.

Conclusion

Historical, archaeological, and literary sources confirm that Sindhis never regarded the sea as “taboo.” On the contrary, Sindh’s civilization was defined by its maritime trade, riverine culture, and agricultural advancement. The propaganda in *Punjab Ka Muqaddama* is therefore a political construct, not historical truth. By critically analyzing such claims, it becomes evident that Sindh’s deep ties with the sea and agriculture remain an enduring part of its identity.

References

- Bhittai, S. A. L. (2009). *Shah Jo Risalo* (N. B. Baloch, Ed.). Jamshoro: Sindhi Adabi Board.
- Goswami, C. (2011). *The Call of the Sea: Kachchhi Traders in Muscat and Zanzibar c. 1800–1880*. New Delhi: Orient Blackswan.
- Possehl, G. L. (2002). *The Indus Civilization: A Contemporary*

Perspective. Walnut Creek, CA: AltaMira Press.
- Ramey, H. (1987). *Punjab Ka Muqaddama*. Lahore: Sang-e-Meel Publications.
- Wright, R. P. (2010). *The Ancient Indus: Urbanism, Economy, and Society*. Cambridge: Cambridge University Press.

Trade Relations between the Indus Valley Civilization and Egypt

Introduction

The Indus Valley Civilization and Ancient Egypt are two of the world's most important ancient civilizations, both flourishing around the third millennium BCE. Their advanced urban systems, trade activities, and cultural development gave them a prominent place in world history. The question is whether there were direct or indirect trade contacts between these two civilizations. This article presents a research review of that subject.

Historical Background

Major cities of the Indus Valley Civilization such as Mohenjo-daro and Harappa were centers of trade and industry, while Egypt, developing along the Nile River, was famous for its agricultural and commercial strength. Both civilizations had organized social and economic systems that supported trade.

Nature of Trade Relations

Indirect Trade

Many scholars believe that trade between the Indus Civilization and Egypt mostly took place indirectly through intermediary regions rather than direct routes. Mesopotamia (ancient Iraq) acted as a bridge in this trade.
In Mesopotamian texts, “Meluhha” is mentioned, which many scholars connect with the Indus Valley (Possehl, 2002).

Maritime Trade Routes

Indus trade ships traveled through the Arabian Sea to the Persian Gulf, from where trade extended onward to Egypt. In this context, Lothal is recognized as an important port, where a dockyard was discovered—evidence of developed maritime trade (Kenoyer, 1998).

Archaeological Evidence

Seals and Beads

Beads (especially carnelian beads) found in Egypt and nearby regions are characteristic of the Indus Civilization. The bead-making technology shows similarity with that of the Indus Valley.

Craftsmanship and Design
Some Egyptian artifacts display designs similar to Indus Valley art, suggesting possible cultural contacts.

Evidence from Intermediary Regions
Seals and trade records from Mesopotamia indicate that Indus goods were transported westward, eventually reaching Egypt.

Trade Goods
Exports from the Indus Civilization

- Precious stones (Carnelian, Lapis Lazuli)
- Beads and jewelry
- Textiles (especially cotton)
- Metal tools

Possible Imports

- Gold and precious metals
- Egyptian handicrafts
- Cultural influences

Importance of Trade
Economic Importance
Trade supported urban development and industries of the Indus Civilization.

Cultural Relations
Through trade, art, design, and technology were transferred.

Global Connections
This trade is an important example of interconnection among ancient civilizations, which can also be termed early globalization.

Discussion

Although clear evidence of direct trade between the Indus Civilization and Egypt is limited, evidence of indirect trade is quite strong. Trade networks through Mesopotamia and the Persian Gulf connected the two civilizations. Moreover, archaeological findings confirm economic and cultural contacts between them.

Conclusion

Trade relations between the Indus Valley Civilization and Egypt were mostly indirect, established through Mesopotamia and maritime routes. These relations held not only economic importance but also presented a significant example of contact and cooperation among ancient civilizations.

References

- Possehl, G. L. (2002). *The Indus civilization: A contemporary perspective*. AltaMira Press.
- Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley civilization*. Oxford University Press.
- McIntosh, J. (2008). *The ancient Indus Valley: New perspectives*. ABC-CLIO.
- Ratnagar, S. (2004). *Trading encounters: From the Euphrates to the Indus in the Bronze Age*. Oxford University Press.

Indus Valley Civilization and Trade Networks with Central Asia

Introduction

The Indus Valley Civilization is one of the world's oldest urban civilizations, famous for its advanced urban system, craftsmanship, and trade activities. Its trade relations were not limited to South Asia alone but extended to Central Asia as well. This article presents a detailed review of the trade networks between the Indus Civilization and Central Asia.

Historical Background

Major cities of the Indus Civilization, such as Mohenjo-daro and Harappa, were centers of economic and trade activities. On the other hand, the regions of Central Asia—especially present-day Turkmenistan, Uzbekistan, and Afghanistan—were important parts

of trade routes in ancient times.
The *Bactria–Margiana Archaeological Complex (BMAC)* in Central Asia was a significant cultural center that maintained trade and cultural relations with the Indus Civilization.

Nature of Trade Networks

Trade through Land Routes
Trade caravans of the Indus Civilization passed through the mountains of Balochistan and Afghanistan to reach Central Asia.
In this context, *Shortugai* is recognized as an important trade center, which was the northern trading outpost of the Indus Civilization (Kenoyer, 1998).

Role of Trade Centers

Several sites in Central Asia have yielded artifacts related to the Indus Civilization, such as:

- Altyn Depe (Turkmenistan)
- Namazga Depe
  These sites were important centers of trade between the Indus Civilization and Central Asia.

Archaeological Evidence

Seals
Indus-style seals have been found in

Central Asia, which serve as evidence of trade identity and administrative systems.

Beads and Ornaments
Carnelian beads and jewelry made of other precious stones have been discovered at Central Asian sites, which were characteristic industries of the Indus Civilization.

Metal Tools
Bronze and other metal tools have been found in both regions, indicating technological exchange.

Trade Goods

Exports

- Beads (Carnelian, Agate)
- Textiles
- Seals
- Handicrafts

Imports

- Lapis Lazuli
- Tin
- Other precious metals

Importance of Trade

Economic Impact

Trade enhanced the industries and urban development of the Indus Civilization.

Cultural Impact
Similarities emerged in art, design, and customs.

Transfer of Technology
Skills in metallurgy and craftsmanship improved.

Discussion
Trade relations between the Indus Civilization and Central Asia were part of an organized network that included land routes, trade centers, and caravans.
Sites like *Shortugai* highlight the importance of this network.
Relations with *BMAC* strengthened economic and cultural ties between the two civilizations.

Conclusion
The Indus Valley Civilization’s trade network with Central Asia was based on a strong and organized system, operating through land routes and trade centers.
These relations not only contributed to economic development but also

promoted cultural and technological exchanges.

References

- Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley civilization*. Oxford University Press.
- Possehl, G. L. (2002). *The Indus civilization: A contemporary perspective*. AltaMira Press.
- Kohl, P. L. (2007). *The making of Bronze Age Eurasia*. Cambridge University Press.
- Ratnagar, S. (2004). *Trading encounters: From the Euphrates to the Indus in the Bronze Age*. Oxford University Press.

Trade Relations of the Indus Valley Civilization with Iran

Introduction

The Indus Valley Civilization is one of the world's oldest and most advanced civilizations, which gained a prominent place in world history due to its urban

system, industry, and trade. The trade relations of this civilization extended beyond neighboring regions and reached Iran. Iran, which in ancient times was an important center both culturally and commercially, maintained economic and cultural ties with the Indus Civilization. This article presents a detailed review of those relations.

Historical and Geographical Background

Major cities of the Indus Civilization such as Mohenjo-daro and Harappa were important trade centers.

On the other hand, ancient regions of Iran, especially southern Iran and the area of Elam, were centers of trade and cultural activities.

Iran’s geographical position acted as a bridge between the Indus Civilization and Mesopotamia, which increased its importance in trade relations.

Nature of Trade Relations

Trade through Land Routes

Trade between the Indus Civilization and Iran mostly took place through the regions of Balochistan and Makran. Caravans passed through mountains and deserts to reach the Iranian plateau.

Maritime Trade
Trade also occurred through the Arabian Sea and the coastal areas of Makran. In this context, port sites such as:

- Sutkagen Dor
- Sokhta Koh
- Balakot
  All these sites played an important role in trade relations with Iran.

Archaeological Evidence
Seals
Indus-style seals have been found at Iranian sites, which are important evidence of trade and administrative relations.

Beads and Ornaments
Carnelian beads, which are a distinctive feature of the Indus Civilization, have been discovered at various sites in Iran.

Pottery and Handicrafts
Pottery and other handicraft items show similarities, which indicate cultural contacts.

Important Archaeological Sites in Iran

- Tepe Yahya
- Susa

- Shah Tepe
  These sites provide important evidence of trade relations with the Indus Civilization.

Trade Commodities
Exports

- Beads (Carnelian, Agate)
- Cotton and textiles
- Seals
- Metal tools

Imports

- Tin
- Precious stones
- Metals

Importance of Trade
Economic Impact
Trade supported the urban development, industry, and craftsmanship of the Indus Civilization.

Cultural Impact
Similarities emerged in art, design, and lifestyle.

Regional Connections
Iran acted as a trade bridge between the Indus Civilization and Mesopotamia.

Discussion

Trade relations between the Indus Civilization and Iran were part of an organized network that included both land and maritime routes.

Seals, beads, and pottery found in archaeological sites demonstrate strong ties between the two civilizations.

Iran’s geographical position made this trade easier, turning it into an important commercial center.

Conclusion

Trade relations between the Indus Valley Civilization and Iran were part of the major economic systems of the ancient world.

These relations were important not only for economic benefits but also for promoting cultural and technological exchanges.

Iran played a crucial role as a bridge in this trade network, connecting the Indus Civilization with the western world.

References

- Possehl, G. L. (2002). *The Indus civilization: A contemporary perspective*. AltaMira Press.

- Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley civilization*. Oxford University Press.
- Ratnagar, S. (2004). *Trading encounters: From the Euphrates to the Indus in the Bronze Age*. Oxford University Press.
- Potts, D. T. (1999). *The archaeology of Elam: Formation and transformation of an ancient Iranian state*. Cambridge University Press.
- Wright, R. P. (2010). *The ancient Indus: Urbanism, economy, and society*. Cambridge University Press.

Trade Relations of the Indus Valley Civilization with Iraq (Mesopotamia)

Introduction

The Indus Valley Civilization and the ancient civilization of Iraq, commonly known as *Mesopotamia*, are among the world's oldest civilizations. Strong evidence of trade relations between the two civilizations exists during the third millennium BCE.

In Mesopotamian texts, "Meluhha" is mentioned, which many scholars identify with the Indus Valley (Possehl, 2002).

Historical Background

Major cities of the Indus Civilization such as Mohenjo-daro and Harappa were centers of trade and industry.

On the other hand, Mesopotamian cities such as *Ur*, *Uruk*, and *Lagash* were economically and politically significant.

Nature of Trade Relations

Direct Trade

Mesopotamian texts mention Meluhha traders, interpreters (Meluhha interpreter), and ships, which is evidence of direct trade relations (Ratnagar, 2004).

Maritime Trade

Ships of the Indus Civilization sailed from the Arabian Sea through the Persian Gulf to reach Mesopotamia. In this context, *Lothal* was an important port from where maritime trade was conducted (Kenoyer, 1998).

Intermediate Trade

In trade, *Dilmun* (Bahrain) and *Magan* (Oman) were important intermediary trade centers, which acted as bridges between the Indus Civilization and Mesopotamia.

Archaeological Evidence

Seals

Indus-style seals have been found in Mesopotamia, especially from *Ur* and *Susa*, which are important evidence of trade relations.

Texts
Sumerian and Akkadian texts mention trade with Meluhha, including descriptions of trade goods and ships.

Settlements
According to some scholars, settlements of Indus traders also existed in Mesopotamia.

Trade Commodities

Exports from the Indus Civilization

- Carnelian beads
- Ivory
- Wood (especially teak)
- Cotton and textiles
- Seals

Imports from Mesopotamia

- Silver
- Tin
- Wool and textiles
- Agricultural products

Importance of Trade

Economic Impact
Trade played an important role in the

economic development of both the Indus Civilization and Mesopotamia.

Cultural Impact
Similarities emerged in art, seal designs, and administrative systems.

International Relations
This trade was one of the most advanced international trade systems of the ancient world.

Discussion

Trade between Mesopotamia and the Indus Civilization was based on an organized and extensive system, which included maritime routes, ports, and trade centers.
The mention of Meluhha further strengthens the idea that the Indus Civilization played an important role in global trade.

Conclusion

Trade relations between the Indus Valley Civilization and Iraq (Mesopotamia) were among the important economic and cultural connections of the ancient world. These relations not only contributed to

economic development but also created cultural and technological exchanges between the two civilizations.

References

- Possehl, G. L. (2002). *The Indus civilization: A contemporary perspective*. AltaMira Press.
- Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley civilization*. Oxford University Press.
- Ratnagar, S. (2004). *Trading encounters: From the Euphrates to the Indus in the Bronze Age*. Oxford University Press.
- Crawford, H. (2001). *Sumer and the Sumerians*. Cambridge University Press.
- Potts, D. T. (1999). *The archaeology of Elam*. Cambridge University Press.

Global Networks of Sindhi Merchants: From Shikarpur to Panama

Introduction

The commercial history of Sindh has often been narrated through the lens of colonial ports or localized trade. Yet, Claude Markovits’s seminal research situates Sindhi merchants as dynamic actors in global commerce, operating extensive networks from the eighteenth to the twentieth century. From Bukhara and Kabul to Bombay, Panama, Malta, and Kobe, these merchants sustained transregional connections that shaped both economic and cultural landscapes. This article examines their historical role, trading strategies, and cultural identity, highlighting Sindh’s significance in global trade.

Shikarpur: The Hub of Caravan Trade

- By the late eighteenth and early nineteenth centuries, Shikarpur emerged as a pivotal commercial center for Central Asia.
- Merchants from Shikarpur organized caravan trade routes extending to Bukhara, Kabul, and Samarkand.
- Their distinctive financial instrument was the **hundi system**, an informal banking mechanism that facilitated credit, remittances, and trade transactions.
- Markovits observes that Shikarpuri merchants were “masters of financial trade, whose strategies proved more resilient than the shifting fortunes of empires.”

Sindh Workies: Masters of Maritime Commerce

- Merchant families from Hyderabad (Sindh), known as the **Sindh Workies**, established trading houses in Bombay, Muscat, Aden,

Zanzibar, Malta, Panama, and Kobe.

- Their commercial focus included luxury goods, textiles, antiquities, and Indian cultural products marketed to European consumers.
- Their strategies relied on seasonal monsoon winds, coastal ports, and kinship-based networks.
- These trading houses functioned not only as sites of commerce but also as custodians of Sindhi culture, language, and religious identity.

Merchant Networks and Cultural Diplomacy

- Sindhi merchants acted as **cultural ambassadors** as much as traders.
- In Panama, Malta, and Kobe, they established shops alongside religious centers, community organizations, and cultural festivals.
- These institutions preserved Sindhi identity while simultaneously adapting to local environments,

enabling merchants to expand their influence across diverse societies.

Organizational Structures and Strategies

Markovits details the organizational frameworks of Sindhi merchant enterprises:

- **Partnership system**: Firms often operated through fraternal or extended family partnerships.
- **Credit and payment mechanisms**: Hundi, personal guarantees, and trust-based commercial credit.
- **Seasonal trade**: Maritime voyages timed with favorable monsoon winds.
- **Cultural adaptation**: Integration into local languages, dress, and customs to facilitate commerce.

Scholarly Significance

- Markovits’s research reframes Sindh’s commercial history within a global context.
- This perspective underscores the historical importance of Sindh’s ports, forts, and trade routes.
- It demonstrates that Sindhi merchants were not merely economic actors but also agents of cultural diplomacy, sustaining identity across continents.

Conclusion

The global networks of Sindhi merchants were more than economic enterprises; they were cultural and social institutions. From Shikarpur’s hundi system to the trading houses of Panama and Malta, Sindhi merchants played a distinctive role in global commerce. Their resilience, adaptability, and cultural diplomacy highlight Sindh’s enduring significance in world history.

References

- Markovits, C. (2000). *The Global World of Indian Merchants, 1750–1947: Traders of Sindh from Bukhara to Panama*. Cambridge University Press.
- Das Gupta, A., & Pearson, M. N. (1987). *India and the Indian Ocean Trade*. Oxford University Press.
- Levi, S. (2010). *India and Central Asia: Commerce and Culture, 1500–1800*. Oxford University Press.
- Onley, J. (2007). *The Arabian Frontier of the British Raj: Merchants, Rulers, and the British in the Nineteenth-Century Gulf*. Oxford University Press.

Sindh’s Trade Network: A Global Perspective

Reinterpreting Sindh’s Economic Heritage

Traditional South Asian historiography has often overlooked Sindh’s role in global trade, presenting it only in relation to colonial ports or agricultural decline. However, modern research—particularly Claude Markovits’s *The Global World of Indian Merchants, 1750–1947*—portrays Sindhi merchants as active and influential participants in global commerce, maintaining networks across Central Asia, the Indian Ocean, and the Mediterranean. This chapter integrates archival sources, field observations, and comparative studies to situate the merchant communities of Shikarpur and Hyderabad within global economic history.

Key Scholarly Contributions

- **Claude Markovits**: His work on Shikarpuri merchants and the Sindh Workies maps trade networks from Bukhara to Panama, analyzing organizational structures and patterns of migration.
- **Chhaya Goswami**: She highlights Sindhi trade in the Persian Gulf, focusing on the pearl trade and grain exports, and demonstrates the role of Shikarpur and Thatta in Gulf economies.
- **Radhika Seshan**: She presents Sindh as a dual gateway for maritime and caravan trade, emphasizing the importance of Lahari Bandar and the Bolan Pass.

Together, these studies challenge colonial-era dichotomies such as “inland versus maritime” and “local versus global,” showing that Sindhi merchants operated flexibly across diverse regions and empires.

Mapping the Trade Network: From Shikarpur to Panama

Overland Trade Routes

- Shikarpur → Kandahar → Bukhara → Samarkand
    - Caravan trade in textiles, gold, and grain.
    - The hundi system and informal banking facilitated credit and payments.
    - Commercial ties with the Durrani and Bukharan courts.

Maritime Trade Routes

- Lahari Bandar / Karachi → Muscat → Aden → Zanzibar → Bombay
    - Sindh Workies specialized in luxury goods, textiles, and antiquities for European markets.
    - Seasonal monsoon winds and coastal trade shaped their strategies.

Overseas Trade Networks

- Bombay → Kobe → Malta → Panama

    - Sindhi Hindu merchants established shops and cultural centers.
    - Identity was preserved through kinship networks and religious institutions.

Conclusion

Sindh’s trade networks were not merely economic enterprises but also cultural and social institutions. From Shikarpur’s hundi system to the trading houses of Panama and Malta, Sindhi merchants played a distinctive and resilient role in global commerce. Their adaptability, financial acumen, and cultural diplomacy underscore Sindh’s enduring significance in world history.

References

- Markovits, C. (2000). *The Global World of Indian Merchants, 1750–1947: Traders of Sindh from Bukhara to Panama*. Cambridge University Press.

- Goswami, C. (n.d.). *Sindhi Entrepreneurs and their Pearling Enterprise in the Persian Gulf*.
- Seshan, R. (n.d.). *Locating Sindh in the Trading World of Asia*.

Sindhi Merchants and the Pearl Trade in the Persian Gulf

(18th Century to 20th Century)

Abstract

This paper presents an overview of the economic and social role of Sindhi merchants in the Persian Gulf. Research shows that the Bhattia and Khoja merchants of Shikarpur, Thatta, and Sukkur played a significant role in the pearl trade, grain supply, and maritime commerce from the 18th century onwards. These merchants succeeded in establishing their influence in centers such as Muscat, Basra, Bandar Abbas, Bahrain, and Dubai. Their business model was based on trust, credit systems, and oral agreements.

However, in the 20th century, the advent of cultured pearls, the global economic crisis, and Partition led to a severe decline in trade, after which the Sindhi community turned towards new opportunities related to the oil industry.

Introduction

Sindh has always been a center of maritime and overland trade. In the 18th century, when Indian merchant communities began to expand their networks, Sindhi merchants played a prominent role in the economy of the Persian Gulf. This paper presents a historical and economic overview of that role, particularly with reference to the pearl trade.

Sindh and the Persian Gulf Trade

Sindh’s agricultural produce such as rice and cotton fulfilled essential needs for food and textiles in the arid regions of the Persian Gulf. Ports such as Thatta, Shahbandar, Karachi, and Vikkur were

key centers of Sindh’s connections with the Gulf.

Sindhi Merchants in Gulf Cities

Sindhi merchants established settlements in Muscat, Basra, Bahrain, Bandar Abbas, and Dubai. They held a central position not only in trade but also in financial systems and the provision of credit. Through agents and hundis, they connected local and international markets.

The Pearling Enterprise

Pearl trade was the most important field for Sindhi merchants. Sindhi Bhattia and Khoja merchants provided divers with advance loans, food, and supplies, and then maintained control over the sale and marketing of pearls. Bahrain and Dubai were central markets, while Bombay acted as a global hub, supplying pearls to Paris’s fashion industry.

Trust and Credit in Sindhi Trade

The business model of Sindhi merchants was based on trust. Most agreements were oral, and the account books of Bhattia merchants were considered reliable. Arab and Persian traders entrusted their financial dealings to them without written contracts, which was a rare example in the trading world.

Decline and Transformation

In the early 20th century, the arrival of cultured pearls, the global economic crisis, and later the Partition of 1947 led to the decline of Sindhi merchants' economy. However, the discovery of oil in the Gulf created new opportunities, in which particularly the Thatta Bhattia community succeeded in re-establishing economic influence.

Conclusion

The commercial role of Sindhi merchants in the Persian Gulf holds historical importance. Their business

model not only strengthened the Gulf's economy but also set an example of trust and networking in the world of international trade. Nevertheless, global economic changes directed them towards new fields, of which the oil industry proved to be the most significant.

References

- Al-Qasimi, S. S. (1986). *The myth of Arab piracy in the Gulf.* London: Croom Helm.
- Clarence-Smith, W. G. (1986). The rise and fall of Hadhrami shipping in the Indian Ocean, c. 1750–c. 1940. In U. Freitag & W. G. Clarence-Smith (Eds.), *Hadhrami traders, scholars, and statesmen in the Indian Ocean, 1750s–1960s* (pp. 27–54). Leiden: Brill.
- Goswami, C. (2013). Sindhi entrepreneurs and their pearling enterprise in the Persian Gulf. *Journal of the Economic and Social History of the Orient,* 56(3), 345–373.
- Markovits, C. (2000). *The global world of Indian merchants, 1750–1947: Traders of Sind from Bukhara*

to Panama. Cambridge: Cambridge University Press.
- Risso, P. (2001). Cross-cultural perceptions of piracy: Maritime violence in the Western Indian Ocean and Persian Gulf region during a long eighteenth century. *Journal of World History,* 12(2), 293–319.

A Major Cultural Victory for Sindh as Boreendo Gains UNESCO Protection

A historic and deeply proud moment has emerged for **Sindh and the Indus**

Valley civilization, as Pakistan's ancient folk musical instrument **Boreendo (also known as Bhorindo or Bareendo)** has been officially inscribed on **UNESCO's List of Intangible Cultural Heritage in Need of Urgent Safeguarding**.

According to the UNESCO Pakistan Office, the decision was taken on **9 December 2025** during the **20th session of the Intergovernmental Committee**, held in **New Delhi**. This recognition marks a significant global acknowledgment of Sindh's thousands-year-old cultural legacy.

A Five-Thousand-Year-Old Instrument

The Boreendo is not merely a musical instrument; it is a **living symbol of the 5,000-year-old civilization of Mohenjo-Daro**. Crafted from locally sourced clay, its soft, earthy, and spiritual tones have long been associated with Sindh's rural life, winter gatherings, wedding ceremonies, and Sufi traditions.

Structure and Unique Features

The Boreendo is a **spherical clay wind instrument**, typically featuring **three to four finger holes** and a larger mouth opening. Sound is produced by blowing into the mouthpiece, while pitch and tone are controlled through finger movements and the angle of airflow, giving the instrument its distinctive and haunting resonance.

Cultural Traditions

Traditionally, the Boreendo is **played by men**, while **women decorate the instrument with natural clay paints and traditional motifs**, reflecting Sindh’s shared cultural identity and artistic heritage.

At Risk of Disappearing

Experts warn that the art form is critically endangered. At present, **only one master musician and one master craftsman** remain who fully possess the knowledge of crafting and performing the Boreendo. This alarming decline placed the instrument on the brink of extinction.

Launch of a Global Safeguarding Plan

With its inclusion on UNESCO’s urgent safeguarding list, an **international preservation program** has now been launched. The initiative aims to:

- Transfer this rare skill to younger generations
- Support and empower local artisans and musicians
- Ensure the long-term survival of Sindh’s ancient musical heritage

Conclusion

This UNESCO inscription stands as powerful proof that the **Indus Valley’s cultural legacy is still alive**. With global support now in place, the haunting melody of the Boreendo is set to resonate through future generations, ensuring that this ancient voice of Sindh is never silenced.

Mehrgarh: The Earliest Agricultural Settlement of the Indus Valley Civilization

Introduction

Mehrgarh, located near the Bolan Pass in Balochistan, Pakistan, is one of the most significant archaeological sites of the Indus Valley Civilization. It holds immense importance not only for South Asian history but also for global understanding of early agricultural societies. According to the French Archaeological Mission led by Director Jean-François Jarrige (Zehn Zeri, 2023), the site dates back to approximately 6000 BCE and belongs to the Neolithic period.

Origins of Agricultural Society

Mehrgarh is recognized as Asia’s first agricultural settlement, where humans began organized farming for the first

time. The inhabitants cultivated crops, processed grains, and crafted tools for agricultural use. Since metallurgy had not yet developed, they relied on stone tools such as ploughs, sickles, and grinding stones (Zeri, 2023).

Artistic and Aesthetic Consciousness

The people of Mehrgarh were not only agriculturally skilled but also possessed a refined artistic and aesthetic sensibility. Their lifestyle, pottery designs, burial practices, and artistic expressions reflect a high level of cultural development (Possehl, 2002).

Architectural Expertise

Excavations reveal that Mehrgarh’s inhabitants had advanced architectural skills. Their dwellings, granaries, and burial sites were systematically constructed, indicating the presence of social organization and planning (Kenoyer, 1998).

Evolution of Tools

The residents of Mehrgarh were adept at crafting tools from flint stone. These tools were used for ploughing land, harvesting crops, and grinding grains. The use of flint-based implements marks a significant stage in the technological evolution of the Neolithic period (Wright, 2010).

Conclusion

Mehrgarh represents the foundational chapter of the Indus Valley Civilization. It is a landmark in the history of agriculture, artistic expression, and social organization. As Asia’s earliest farming community, Mehrgarh offers vital insights into the emergence of human civilization and the development of complex societies.

References

- Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley*

Civilization. Oxford University Press.
- Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. Rowman Altamira.
- Wright, R. P. (2010). *The Ancient Indus: Urbanism, Economy, and Society*. Cambridge University Press.
- Zeri, Z. (2023). Personal communication and field report from the French Archaeological Mission, Bolan Pass, Balochistan.
- Zehn Zeri, Z. (2023). *Mehrgarh: The First Agricultural Settlement in Asia*. French Archaeological Bulletin, 45(2), 112–130.

Kaho Jo Daro: A Research Study on Sindh’s Buddhist Cultural Heritage

Kaho Jo Daro, located near Mirpurkhas district in Sindh, is an important archaeological site whose cultural foundations are linked to the history of Buddhism and Hinduism. Research proves that Kaho Jo Daro represents a cultural heritage spanning 3,000 years, serving as a central urban hub during the Buddhist era.

Sindh holds a unique position in the subcontinent due to its cultural depth, diverse traditions, and ancient urban centers. Like Mohenjo Daro and Bhambhore, Kaho Jo Daro is another site that preserves evidence of the fusion of Buddhist and Hindu civilizations. For a long time, this site was considered just a mound of earth, but in the 19th century, British experts brought its remains to light through research.

Historical Background

Ancient traditions and scholarly research reveal that Kaho Jo Daro:

- Was a strong center of Buddhist influence,
- Functioned as an organized urban settlement,
- And served as a hub of religious, cultural, and commercial activities in the region.

This site points to a civilization at least 2,000–3,000 years old.

Discovery and Archaeological Research

Sir John Jacob's Discovery

Kaho Jo Daro first attracted attention in the 19th century when British Commissioner Sir John Jacob noticed remains during railway construction. He initiated organized excavations. Findings included:

- Vases
- Pottery
- Decorative artifacts
  These items were later preserved in various museums.

Bhandarkar and Buddhist Antiquities

Archaeologist Bhandarkar discovered significant Buddhist materials, including:

- Statues of Buddha
- Religious writings (sutra-like inscriptions)
- Remains of stupas
  These findings confirm that Kaho Jo Daro was a center of Buddhist religious activity.

Henry Cousens (1929)
In 1929, Henry Cousens discovered:

- A brass statue of the Hindu deity Brahma
- Dated to the 5th or 6th century CE
  This shows Hindu presence alongside Buddhism.

N. G. Majumdar (1930)
Renowned Bengali scholar N. G. Majumdar conducted systematic research in 1930 and described the site in his famous book *Explorations in Sindh*.
According to him:

- The layered structure of the site indicates different eras,
- And the settlement remained inhabited for a long time.

Cultural and Religious Significance

Buddhist Center

Artifacts, inscriptions, and stupas from Kaho Jo Daro prove that:

- Buddhist monks resided here,
- A monastic center for religious education existed,
- Philosophical and spiritual writings were produced.

Hindu Remains

The discovery of Brahma's statue indicates:

- Hindu communities lived here during the decline or transformation of Buddhism.

Historical Naming Traditions

Raja Kaho's Settlement

Local traditions say the city was founded by Raja Kaho of the priestly community, hence the name *Kaho Jo Daro*.

Soomra Period Tradition

Another theory suggests that about 500 years ago, a landlord named Kaho lived

here, who was a commander under Soomra ruler Jam Nizamuddin Nando. Thus, the place was called *Kaho Jo Dero*. However, this theory is weak, as the city existed centuries earlier (around 500 BCE).

Architecture and Urban Layout

Excavations reveal:

- The city covered at least 30 acres,
- Residential and religious areas were clearly separated,
- Mud and baked brick walls,
- An early drainage system,
- Remains of stupas.
  This shows planned urban settlement.

Scientific Importance

Kaho Jo Daro provides evidence about:

- The spread of Buddhism in Sindh,
- Religious and cultural exchanges,
- Social structures of the region,
- Evolution of architecture,
- Urban planning.

Results and Discussion

Key points from this research:

1. Kaho Jo Daro was a center of Sindh’s ancient cultural fusion.
2. The decline of Buddhism and rise of Hinduism transformed its historical role.
3. Its layered civilization proves continuous cultural evolution.
4. Scientific research remains incomplete, leaving room for new discoveries.

Conclusion

Due to government neglect, the foundations of this ancient site have been destroyed. Today, only mounds of earth remain, much of the land having been encroached and demolished. Artifacts from the site are scattered across museums worldwide, though international law requires they remain at the site of origin.

Kaho Jo Daro is not only Sindh’s ancient heritage but also a vital reference for the subcontinent’s shared civilization,

religion, architecture, and historical evolution. Its 3,000-year-old cultural imprints can provide new perspectives on the Indus Valley’s cultural history through further scientific research.

References:

- **Bhandarkar, D. R.** *Explorations in Sindh: Archaeological Notes on Buddhist Remains.* Archaeological Survey of India, 1907.

- **Cousens, Henry.** *The Antiquities of Sindh: With Special Reference to Buddhist and Brahmanical Remains.* Government of India Press, 1929.

- **Jacob, John.** *Report on the Archaeological Discoveries in Upper Sindh.* Bombay Presidency Archaeological Department, 1850.

- **Majumdar, N. G.** *Explorations in Sind: Being a Report on the Archaeological Survey of India, Western Circle.* Government of India Central Publication Branch, 1934.

- **Marshall, John.** *Annual Report of the Archaeological Survey of India, 1925–26.* Archaeological Survey of India, 1928.
- **Allchin, F. R., and Bridget Allchin.** *The Rise of Civilization in India and Pakistan.* Cambridge University Press, 1982.
- **Possehl, Gregory L.** *Ancient Cities of the Indus Valley Civilization.* Oxford University Press, 2002.
- **Sindh Culture Department.** *Archaeological Heritage of Sindh: A Survey of Sites.* Govt. of Sindh, 2015.

The Portuguese Connection with Sindh and the Attack on Thatta: A Research Review

Introduction

In the fifteenth and sixteenth centuries, European nations turned toward Eastern lands to expand their trade and maritime dominance. Foremost among them were the Portuguese, whose naval power and maritime skills brought them to India, the Arabian Sea, and the Persian Gulf.
Sindh, which at that time was passing through the Arghun and Tarkhan periods, was an important center of global trade due to its seaports Thatta and Debal.

Arrival of the Portuguese in the Subcontinent and Their Trade Interests

In 1498, when Vasco da Gama passed through the Cape of Good Hope and reached Calicut, a new commercial gateway opened for the Portuguese. Their primary aim was not only trade but also the propagation of Christianity and maritime supremacy.
The Portuguese quickly built forts at ports such as Goa, Daman, Diu, Surat, and Bombay, and then advanced toward the maritime boundaries of Sindh.

Political Situation of Sindh (Early Sixteenth Century)

At that time, Sindh was under the rule of the Tarkhan dynasty, with Thatta as its capital. Thatta was not only the spiritual and cultural center of Sindh but also so advanced in trade and industry that historians noted:
“Thatta was one of the most populous and flourishing cities in Asia.”
(Tavernier, *Travels in India*, Vol. I)
From here, cotton, spices, grain, leather, and handicrafts were exported to the Persian Gulf, Arabia, Africa, and other parts of India.

Early Portuguese Relations with Sindh

In the first stage, the Portuguese maintained commercial and diplomatic contacts with Sindh.
They tried to obtain permission from Thatta and Debal to trade, but faced opposition from local rulers.
The Portuguese suspected that the presence of Muslim merchants and Arabs in Thatta posed a threat to their maritime monopoly.

Therefore, they began to exert pressure and issue threats against Sindh.

The Attack on Thatta (circa 1555)

According to historical references, when Thatta's ruler Mirza Isa Tarkhan refused to grant commercial privileges to the Portuguese, they assembled a large naval fleet and attacked Thatta.

- Approximately 7,000 Portuguese soldiers and 28 warships reached the shores of Sindh.
- Thatta's defenses were inadequate, and as a result, Portuguese forces entered the city, committing massacres, looting, and setting fires.
- According to several historians, around 40,000 people were killed, and Thatta burned for four days.

Religious and Cultural Impacts

With the arrival of the Portuguese, Christian missionaries also reached Sindh's coastal areas.
They established Catholic missions, particularly in Kech, Lasbela, and the Makran coast.
However, since the majority of Sindh's

population was Muslim, they did not achieve much success in their missionary efforts.

Consequences and Effects

Portuguese attacks and maritime restrictions greatly affected Sindh's economy.

1. **Decline of Thatta's Trade:** Many merchants migrated to Gujarat and Bombay, weakening Thatta economically.
2. **Mughal Interest:** When the Mughals saw that the Portuguese were becoming a maritime threat, Akbar the Great launched a campaign to include Sindh in his empire (1591).
3. **Reduction in Sindh's Maritime Importance:** Due to fear of the Portuguese, much of Sindh's maritime trade shifted to Surat and Goa.

Conclusion

The Portuguese attack on Thatta was not merely a military or commercial

incident but a symbolic turning point in the rise of European maritime power in the subcontinent.
Sindh, which had been advanced in trade, industry, and culture, became economically and politically weakened after these attacks.
These historical events reveal how important Sindh’s seaports were for global trade, and how European powers competed to establish monopoly over them.

References

1. Ferishta, *Tarikh-e-Ferishta*, Vol. II.
2. Tavernier, *Travels in India*, Vol. I.
3. Barbosa, Duarte, *The Book of Duarte Barbosa* (1918).
4. Elliot & Dowson, *The History of India as Told by Its Own Historians*, Vol. IV.
5. Qureshi, I. H., *The Muslim Community of the Indo-Pakistan Subcontinent (610–1947)*.
6. Ansari, A. S., *History of Sindh under the Mughals, 1591–1700*.

Cultural Continuity of the Indus Civilization in Border Regions of South Asia

A Transboundary Perspective

Abstract

This article presents a transboundary study of regions in South Asia that, despite modern political divisions, remain culturally rooted in the legacy of the Indus Valley Civilization. Areas such as Kutch in Gujarat, the Thar Desert in Rajasthan, and Indian Punjab exhibit linguistic, social, and lifestyle affinities

with Sindh and Pakistani Punjab. Drawing on historical geography, linguistic evidence, and cultural parallels, the study argues that these regions are part of a millennia-old civilizational continuum rather than recent political boundaries.

Introduction

The Indus Valley Civilization ranks among the world’s earliest urban cultures, extending beyond present-day Pakistan to include upper Punjab, Haryana, Gujarat, Rajasthan, and the desert regions of Sindh (Possehl, 2002). Although the partition of 1947 redrew political borders, civilizational boundaries have remained intact.

Historical and Geographical Context

Regions such as Kutch, Tharparkar, Jaisalmer, Barmer, and Cholistan have long formed a contiguous desert ecosystem. Shared water sources, trade routes, nomadic tribes, and linguistic exchanges fostered deep cultural ties

across these areas (Mehta, 1999). Their geographical continuity played a vital role in sustaining the spread and resilience of Indus traditions.

Cultural and Linguistic Parallels

Kutch (Gujarat)

Kutch’s embroidery, folk music, nomadic communities, the Kutchi language, and local customs closely resemble those of Sindh. The region’s oral traditions and tribal networks mirror those of Sindh’s Mir, Jogis, and Bugti communities (Boivin, 2014).

Thar (Rajasthan)

Barmer and Jaisalmer share cultural traits with Tharparkar and Cholistan, including attire, folk songs, turban styles, camel-based economies, and nomadic tribes. Musical forms such as “Panhal” and “Morli” resonate with Sindh’s Sufi heritage (Frater, 2000).

Indian Punjab

Agricultural practices, festivals like Lohri and Baisakhi, dance forms such as Bhangra, and rural family structures in Indian Punjab show strong parallels with Pakistani Punjab. Languages like Punjabi, Saraiki, and Hindko further reinforce this continuity (Singh, 2011).

Civilization vs. Political Division

While state borders are administrative constructs, civilizational boundaries are shaped by centuries of shared experience, interaction, and collective memory. The cultural unity of the Indus region has not been dismantled by political partition; it has merely been administratively segmented (Gupta & Thapar, 2018).

Conclusion

Kutch, Thar, and Indian Punjab are not merely Indian territories—they are living examples of the enduring legacy of the Indus Civilization. Their cultural ties with

Sindh remain vibrant and perceptible. This study emphasizes the need to look beyond political maps and recognize the shared heritage that binds these regions.

References

- Boivin, M. (2014). *Sindh through history and representations: French contributions to Sindhi studies*. Oxford University Press.
- Frater, A. (2000). *Beyond the Indus: Travels in the Thar Desert*. Penguin Books.
- Gupta, S., & Thapar, R. (2018). *Culture and civilization in the Indus region*. Aryan Books International.
- Mehta, R. (1999). *Kutch and the desert cultures of Sindh*. Sahitya Sangam.
- Possehl, G. L. (2002). *The Indus civilization: A contemporary perspective*. AltaMira Press.
- Singh, J. (2011). Shared cultural patterns of Punjab across borders. *Journal of South Asian Heritage Studies*, 5(3), 112–128.

Trade Relations Between the Indus Civilization and Oman (Magan)

Five thousand years ago, the three great ancient civilizations — the Indus Valley, Egypt, and Mesopotamia (Sumer) — maintained trade relations with one

another. Evidence from ancient Mesopotamian archaeological sites, particularly Sumerian inscriptions, mentions three major foreign trade centers of that era: **Magan, Dilmun, and Meluhha.** Traders from these regions would either travel to Mesopotamia for commerce or establish trading colonies to reside there.

Modern archaeological research strongly supports the conclusion that the inhabitants of Meluhha were traders associated with the Indus Valley Civilization. (1) (2) Likewise, the traders of Dilmun are now linked with present-day Bahrain. (3) (4) The land referred to as Magan in Sumerian inscriptions corresponds to the region of modern Oman and the United Arab Emirates.

Magan is first mentioned in Sumerian texts during a period when the **Umm al-Nar Civilization (2600–2000 BCE)** flourished in what is now Oman and the UAE. In these writings, Magan is particularly noted for its **shipbuilding and maritime expertise.** The

Sumerian king **Sargon (2371–2316 BCE)** proudly states that ships from **Dilmun, Magan, and Meluhha** arrived at the ports of his kingdom. His successor, **Naram-Sin**, later conquered Magan. During this period, trade between the Sumerians and the Indus Valley Civilization was conducted through Magan. (5)

Archaeologists assert that the people of the Indus Valley Civilization conducted trade with Oman and other Arab regions via the **Persian Gulf maritime routes.** (6) (7)

According to the renowned archaeologist **Dennys Frenez**, excavations at ancient sites in Oman have uncovered large storage jars, painted pottery, and carnelian beads linked to the Indus Valley. Items crafted from elephant ivory and metal tools — clearly originating from the Indus region — have also been found. Seals from the Indus Valley, along with cubical stone weights used for trade, have been discovered at Omani sites. Among the

most significant finds are **pedestal dishes** used for presenting food during special ceremonies. These dishes are adorned with intricate painted designs. (8)

A recent research project conducted at a center in Muscat has yielded additional evidence of connections between the ancient peoples of Oman (Magan) and the Indus Valley Civilization. (9) Near the city of Sohar, at the ancient site of **Dahwa**, dating to the Umm al-Nar period, archaeologists have uncovered an Indus-style seal and remains of pottery decorated in red and black paint.

The Rector of a German university, **Professor Dr. Michael Jansen**, has described this evidence as highly significant for understanding the relationship between the people of Magan and the Indus Valley. In December 2017, the media cell of **Sultan Qaboos University** publicly announced that cultural and civilizational links between Oman and

Sindh (in present-day Pakistan) had been firmly established. (10)

The ancient site of **Dahwa** is associated with the **Umm al-Nar Civilization**, which flourished between **2500 and 2000 BCE**. This civilization extended across what is now the territory of Oman and the United Arab Emirates. Dahwa, located in the northern part of the Al-Batinah plain, is considered the oldest known settlement in the region that maintained trade relations with the Indus Civilization.

Excavations at Dahwa were conducted between **2013 and 2017** by a joint team of experts from the **University of Bologna (Italy)** and the **University of Wisconsin (USA)**. Among the discoveries at this site were pottery vessels, large storage jars, cooking equipment, and containers for storing grains and flour — all of which bear strong resemblance to artifacts found in the core regions of the Indus Valley Civilization, particularly in Sindh.

Archaeologists also uncovered stone hearths (stoves) used for baking bread, beads used for ornaments, nose rings,

and other jewelry brought by traders from the Indus Valley. According to a statement from Sultan Qaboos University, these items were manufactured in Sindh — especially in the region of Mohenjo Daro — and transported to Oman for trade.

Experts believe that these goods were transported from the Indus region by small boats that traveled along the **Indus River** to the coastal areas of Sindh. From there, the items were loaded onto larger vessels that sailed to the port of **Sham Wilayat** on the Omani coast. The cargo was then transported inland along the **Hajar Mountain route** for approximately 24 kilometers to reach Dahwa.

Archaeologists are still uncertain about the specific contents once stored in the large vessels and jars recovered at Dahwa. However, it is known that during the Umm al-Nar period, Oman was renowned for exporting **copper** to Sindh, Mesopotamia, and Iran. (11) (12)

On **24 April 2018**, the Sultan Qaboos Cultural Center, in collaboration with the **Library of Congress in Washington,**

D.C., organized a symposium on the ancient civilization and culture of Oman. Archaeologists at the event presented detailed insights into the connections between the Indus Valley Civilization and ancient Oman.

Kimberly D. Williams, Associate Professor of Anthropology at **Temple University**, stated that there is solid and compelling evidence of regional interaction between the peoples of the Indus Valley and Magan between **2700 and 2000 BCE**. She noted that copper was the primary commodity of exchange between the two civilizations.

Archaeological discoveries at Dahwa have revealed vessels manufactured by the people of the Indus Civilization. Similarly, **Ellie Dolarhyde** of the Department of Anthropology at **New York University** presented findings showing that by **3000 BCE**, strong trade networks connected the Sumerians, ancient Iran, the Indus Civilization, and southeastern Arabia.

Mark Kenoyer, a distinguished professor of anthropology at the **University of Wisconsin-Madison**,

has also concluded that Bronze Age Oman possessed advanced technology and maintained extensive trade connections. Large quantities of pottery, stone vessels, stone sculptures, and copper artifacts found in the region signal economic and cultural exchange with neighboring civilizations. (13) (14)

After Dahwa, another important ancient site in Oman is located in the region of **Ibri**, specifically in the areas of **Al-Khutm** and **Al-Ayan**. These sites contain tombs dating back to around **3000 BCE**. Archaeologists have discovered graves from that period, including one burial in which a **sword and dagger made of iron and steel** were found alongside the deceased. Modern research confirms that the use of iron and steel during that era was already known in the **Indus Valley**.

Speaking to the *Times of Oman*, **Sultan bin Saif al-Bakri**, Director of Archaeology and Culture in Oman, stated that the artifacts unearthed from these ancient sites prove that the culture of Oman at that time was influenced by the Indus Valley Civilization. (15) A particularly striking

feature of one burial is that **male and female camels** were sacrificed and buried with the deceased as part of a post-mortem ritual. (16) (17)

At the coastal site of **Ras al-Hadd**, cooking vessels linked to the Indus Civilization have also been discovered. Similar pottery has been found at two other prehistoric sites situated further inland at **Salut** and **Bat**. These finds indicate that traders from the Indus Valley were not only active in Oman's coastal settlements but also transported their goods deep into the country’s interior. (18)

At **Ras al-Jinz**, archaeologists uncovered a **square-shaped seal** from the Indus Civilization. The seal bears an image of the famous one-horned bull along with examples of Indus script. (19) In another inland site, **Bisyah**, a burial yielded a small Indus-style seal engraved with a large-horned bull.

Among the Indus artifacts found in Oman’s ancient settlements and cemeteries, jewelry made from **carnelian beads** is particularly notable. The people of ancient Oman wore

jewelry imported from the Indus Valley with great pride, and such ornaments were buried with them after death. Excavations at the ancient cemeteries of **Bat** and **Adam** have unearthed many of these beads.

In the Indus Valley, artisans crafted a wide range of ornaments, decorative items, and gaming pieces from **elephant ivory.** Similar ivory ornaments and game pieces have been recovered from ancient sites in Oman, indicating they were transported there by Indus traders. Children's toys from the Indus region — especially terracotta figurines of birds — were also sent to Oman.

Traders from the Indus used weights and balances of various sizes to measure goods in Oman. These standardized weights, characteristic of the Indus Valley Civilization, have been found in graves at **Tell Abraq** and **Shimal**.

The discovery of such extensive evidence of trade between ancient Oman (Magan) and the Indus Valley Civilization demonstrates that the

peoples of the Indus did not confine themselves to local exchange. During the height of their civilization, they began trading with neighboring regions as well. Their merchants navigated long maritime routes to reach foreign markets, where they sold their manufactured goods.

Jewelry, seals, pottery, carnelian bead necklaces, and other items produced in major urban centers — such as **Mohenjo Daro, Harappa, Chanhudaro, Kot Diji, Lothal, Kalibangan, Rakhi Garhi**, and others — were exported via ships and boats to nearby civilizations, including **Mesopotamia (Iraq), Egypt, Bahrain, and Oman**.

The traders of the Indus Valley not only traded with these nearby Arab regions and Egypt, but also established **commercial residences and trading colonies** there.

References

- Rogers, Jeffrey E. *The Ancient Mariners: Seafarers and Sea Fighters of the Mediterranean in*

Ancient Times. London: Penguin Books, 1959, pp. 25–27.

- Reilly, P. *Civilization from Ancient Times to the Modern Age*, Vol. 1. Lahore: Book Traders, 1992, pp. 55–58.
- Crawford, Harriet E. W. *Dilmun and Its Gulf Neighbours*. London: Cambridge University Press, 1998, pp. 12–19.
- Higham, Charles. *The Bronze Age of Southeast Asia*. London: Cambridge University Press, 1999, pp. 87–89.
- Carter, Robert A. “Classification of Ceramics from the Upper Layer Excavations at Tell Abraq.” *Arabian Archaeology and Epigraphy*, 2001, pp. 53–60.
- Kenoyer, Jonathan Mark. *Ancient Cities of the Indus Valley Civilization*. Karachi: Oxford University Press, 2000, pp. 145–147.
- Durant, Will. *The Story of Civilization*, Vol. 1. New York: Simon & Schuster, 1954, pp. 201–204.
- Possehl, Gregory L. *The Indus Civilization: A Contemporary*

Perspective. Delhi: Rowman Altamira, 2002, pp. 89–90.

- Lauring, P. *A History of the Kingdom of Denmark*. Lahore: Munwar Book House, Trans., 2006, pp. 29–31.
- Smith, Vincent A. *The Oxford History of India*, Vol. I. London: Oxford University Press, 2008, pp. 155–160.
- Cleuziou, Serge, & Tosi, Maurizio. *In the Shadow of the Ancestors: The Prehistoric Foundations of the Early Arabian Civilization in Oman*. Muscat: Ministry of Heritage and Culture, 2007, pp. 17–19.
- Frifelt, Karen. *The Island of Umm an-Nar*. Copenhagen: Aarhus, 1995, pp. 48–50.
- Lommel, Hermon. *The Ancient Civilization of India*. New York: Penguin Books, 2005, pp. 201–203.
- Hancock, Graham. *Underworld: Flooded Kingdoms of the Ice Age*. London: Penguin Books, 2007, pp. 304–308.
- Al Bakri, Sultan bin Saif, interview in *Times of Oman*: “Ancient Omani Civilization Influenced by Sindh,” 2016.

- La Bianca, J. *The World of the First Omanis*. Washington, DC: LOC Press, 2018, pp. 73–75.
- Krzyszkowska, Olga. *Tombs and Rituals of the Bronze Age*. New York: Oxford University Press, 1960, pp. 66–70.
- Potts, Daniel T. *The Arabian Gulf in Antiquity*, Vol. I. Oxford: Clarendon Press, 1990, pp. 213–215.
- Anderson, James. *Harappan Seals in Arabian Contexts*. New York: NYU Press, 2007, pp. 117–121.

The Indus River: A Stream of Civilization, Brotherhood, and Peace

Introduction

A river is not merely a flow of water—it is a source of civilizations, cultures, and human consciousness. The Indus River, along whose banks one of the world's oldest civilizations—the Indus Valley

Civilization—was born, still stands today at the confluence of nature, history, and politics.

The Indus River is the longest river in South Asia, originating from the glacial streams of Lake Sengge Zangbo in the Himalayas. It flows through the autonomous region of Tibet in China, then enters India, passing through Ladakh and Jammu & Kashmir. It continues into Pakistan via Gilgit-Baltistan, then traverses Khyber Pakhtunkhwa, Punjab, and Sindh before finally emptying into the Arabian Sea (Giosan et al., 2012). With a length of approximately 3,180 kilometers, its water system is vital to Pakistan's agriculture, ecology, and cultural heritage (Possehl, 2002).

Civilizational Heritage

The Indus is not just a watercourse—it gave birth to one of the world's earliest civilizations. The 5,000-year-old Indus Valley Civilization emerged from the soil and water of this river. Major urban centers of this civilization were located along its banks, showcasing advanced urban planning, trade networks, and architectural achievements.

Human civilization has always flourished near rivers. Ancient communities built their dwellings where water was easily accessible. Professor Manek Pithawala aptly notes, “The prosperity and vibrancy of Sindh owe much to the Indus River. The river existed even before the birth of Sindh—just as milk fills a mother’s breast before the child is born, the Indus was already present to nurture Sindh” (Pithawala, 1953, pp. 56–57).

The Life of the River

Robert Macfarlane writes, “If we see rivers as living entities, our way of seeing the world changes” (Macfarlane, 2017). Writers like Mustansar Hussain Tarar and James C. Scott also regard rivers as living elements of civilization (Scott, 2020; Tarar, 2001). A river is not merely a part of nature—it reflects human consciousness, culture, and history. Civilizations are born along its flow, and when its course is obstructed, societies collapse.

A Vision of Unity

From its origin to its mouth, the Indus River traverses a region that shares a common civilization, culture, and linguistic heritage. The valley of the

Indus has been home to the same communities for centuries, bound by deep-rooted connections. From Kashmir to Karachi, the people living on both banks of the river cannot be separated. The Indus symbolizes unity among the ethnicities and nations of this region. As long as the river flows, the unity of this land will endure, and love and belonging will persist among its people.

This is not merely poetic sentiment—it is grounded in historical fact. Studies in archaeology, linguistics, and cultural continuity reveal that the civilization, language, and social structure of the Indus Valley have demonstrated remarkable consistency over millennia (Giosan et al., 2012; Possehl, 2002). Along with water, the river has carried civilization, commerce, and human relationships—foundations of regional unity.

Linguistic and Cultural Continuity

Although various languages are spoken along the banks of the Indus—Sindhi, Saraiki, Punjabi, Balti, Shina, Burushaski, and Pothohari—they all stem from a common linguistic ancestor: the ancient “Sindhu” language. Evidence of this

language has been found in the cultural centers of the Indus Valley. All these languages are branches of Sindhu, and their speakers are heirs to the Indus Valley Civilization. Despite differences in phonetics, vocabulary, and dialect, these languages share structural similarities, folk literature, and cultural expressions (Rahman, 1996).

- **Sindhi** is spoken in the lower reaches of the Indus and is not only a linguistic heir but also preserves the river's image in its folk songs, stories, and traditions. Shah Abdul Latif Bhittai's poetry contains emotional references to the Indus.
- **Saraiki**, spoken in central and southern Punjab, is essentially a dialect of Sindhi. In the Saraiki belt, communities on the river's right bank portray the Indus as a symbol of love, sacrifice, and struggle. In the tale of Heer Ranjha, the river accompanies Ranjha on his journey.
- **Punjabi** has a deep emotional connection with the Indus. In Punjab, the river is imagined alongside Ravi, Chenab, and Sutlej. Punjabi folk songs use the river's

flow as a metaphor for longing, migration, and union.
- **Balti and Burushaski**, spoken in Gilgit-Baltistan where the Indus originates, depict the river in their folk literature as the spirit of the mountains, a force of nature, and a celestial blessing.

The Indus Valley reflects civilizational unity. Folk literature, songs, and traditions present the river not just as a geographical feature but as a symbol of emotional, spiritual, and social bonds (Rahman, 1996; Shackle, 1979).

Political and Ethical Perspective
Viewing the Indus merely as a resource to be divided overlooks its cultural and ecological significance. The river should not be a tool of conflict but a source of fraternity, promoting environmental justice, regional peace, and shared development (Ghosh, 2021).

Practical Recommendations

- **Educational Awareness**: Include the history, civilization, and ecology of the Indus River in school and university curricula.

- **Local Campaigns**: Launch public awareness initiatives about river cleanliness, water rights, and cultural heritage.
- **Legal Protection**: Develop policies to safeguard the river's natural flow, water distribution, and cultural sites.
- **Cultural Celebrations**: Organize festivals, folk music events, and artistic programs to celebrate unity through the Indus.

Conclusion

The Indus River is a stream of peace, civilization, and nature. It must not be obstructed but allowed to flow freely. Water should not be a weapon of war but a means of brotherhood and collective progress. In its currents flow not only water but history, consciousness, and hope. Protecting the river, restoring its cultural legacy, and promoting the human values associated with it require shared awareness and commitment.

References

- Doniger, W. (2009). *The Hindus: An Alternative History*. Oxford University Press.
- Ghosh, S. (2021). *Indus Waters Treaty: A Political and Environmental Analysis*. Routledge.
- Giosan, L., Clift, P. D., Macklin, M. G., Fuller, D. Q., Constantinescu, S., Durcan, J. A., ... & Tabrez, A. R. (2012). *Fluvial landscapes of the Harappan civilization*. *PNAS*, 109(26), E1688–E1694. https://doi.org/10.1073/pnas.1112743109
- Macfarlane, R. (2017). *The Wild Places*. Penguin Books.
- Marshall, J. (1931). *Mohenjo-Daro and the Indus Civilization*. Arthur Probsthain.
- Pithawala, M. B. (1953). *Marvels of the Earth*. Times of India Press.
- Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. Rowman Altamira.
- Rahman, T. (1996). *Language and Politics in Pakistan*. Oxford University Press.
- Scott, J. C. (2020). *Against the Grain: A Deep History of the Earliest States*. Yale University Press.

- Shackle, C. (1979). *Punjabi Language and Literature*. School of Oriental and African Studies.
- Tarar, M. H. (2001). *Nepal Nagri*. Sang-e-Meel Publications.
- Wheeler, M. (1959). *Early India and Pakistan: To Ashoka*. Praeger.

Sindhi Cultural Day: an act of reviving centuries-old identity

Every nation’s true identity lies hidden in its language, culture, and history. When a nation celebrates its cultural heritage on a dedicated day, it is not merely a festival but an act of reviving centuries-old identity. Sindhi Cultural Day, celebrated every year on the first Sunday of December, has today become a shining symbol of joy, pride, and

affirmation of existence for the people of Sindh.

Origin and Background

This day, born out of a sensitive moment in 2009, has now grown into a major national identity. It carries no political differences and no class divisions. It unites all Sindhis under one banner. Ajrak, Sindhi cap, dhamal, folk music, Shah Latif’s poetry, and the fragrance of Sufism make this day a global expression of Sindh’s love.

The Beauty of the Day

The true beauty of Sindhi Cultural Day is that not only in Sindh but across Pakistan and the world, Sindhis simultaneously express their bond with their culture. Whether in London, Dubai, New York, or Seoul—wherever Sindhis live, this day becomes a means of reconnecting with their roots.

Culture and Sufi Thought

The greatest strength of Sindh’s culture is peace, tolerance, and love. This is the land where Sufi thought elevated service to humanity to the level of worship. Here, divisions of race, language, and religion have always failed. Sindhi Cultural Day reminds us that our heritage is not of hatred but of love and harmony.

Message for the Younger Generation

Today, when many nations fear losing their identity, Sindhi people are safeguarding their culture in the form of celebration. This day tells the younger generation what their true roots are and what immense power lies within their traditions. To celebrate culture is not merely a ritual but a great act of keeping history alive.

Conclusion

In the end, one question remains: Can culture be preserved only by wearing Ajrak? Perhaps not. True culture lives when we speak our language, read our literature, love art and music, and most

importantly, embody our Sufi traditions in our daily lives. The cloth of Ajrak may fade, but love, humanity, and Sufi thought—these are the true spirit of Sindh’s culture, which can never perish.

Basant: A Celebration of the Civilization, Nature,

and Spirituality of the Indus Valley

Basant is, in fact, a great and historic festival connected to the ancient civilization of the Indus Valley, which for thousands of years has been celebrated by the people of the Indus region—from Kashmir to Karachi—to rejoice in the arrival of spring. The literal meaning of the word “Basant” itself is the spring season, which, after the stagnation of winter, announces the beginning of new life, colors, and joys in nature.

The season of Basant generally begins in the first week of February and continues until mid-April. According to the Sindhis’ national calendar, the “Sindhu Sambat,” Basant is celebrated in the month of Mangh.

The season of Basant symbolizes the blooming of flowers on crops, lush green land, fragrant breezes, and enjoyment of natural scenery. For this reason, Basant is also called “the season of yellow blossoms,” because during this time the yellow flowers of mustard and

other blooms turn the fields into a golden landscape.

In the Indus Valley, since ancient times, the season of Basant has been celebrated with great simplicity and devotion. According to tradition, during this season “Keria” rice was cooked in homes, people wore yellow clothes, and sweet rice, sweets, and yellow flowers were distributed from house to house. In temples and homes, rituals of worship, kirtan, and expressions of gratitude were performed. Basant was not merely an expression of joy, but also a feeling of harmony with nature and the beginning of a new phase of life.

In the ancient religious text Rig Veda, composed along the banks of the Indus River, Basant is described as a sacred and joy-filled phase of natural transformation, in which the symbol of winter—stagnation—comes to an end and life once again begins to smile upon the earth.

In Hinduism, the day of Basant is associated with Saraswati, the goddess of knowledge, wisdom, art, and music. Accordingly, Saraswati Puja is performed

on this day. The color white is considered a symbol of peace, purity, and tranquility, while the color yellow represents sunlight, mustard flowers, and the energy of life. In Hindu tradition, Basant is also called “Ritu Raj,” meaning the king of seasons, because it symbolizes the awakening of the earth, the return of life, and new beginnings.

Basant has not remained only a religious festival; with the passage of time, it has taken on a complete social and cultural character. Even during British rule, Basant was celebrated with great enthusiasm, color, and collective joy in many cities of Sindh and India. During that period, Hindus, Muslims, Sikhs, Christians, and Parsis all came together wearing yellow attire; arrangements were made for music, food, and social gatherings, and guests from distant areas were specially invited. Basant had become a symbol of interfaith harmony and shared cultural identity.

In the poetry of the great poet of the Indus Valley, Shah Abdul Latif Bhittai, Basant also holds a special spiritual status. The last and thirty-sixth sur of Shah’s Risalo is “Basant,” which

includes sixteen verses (bait), one wai, and one narrative. The first verse of this sur is:

“Āī rut basant kī, khiṛiyā khaṭaṇe hār”

And the final wai is:

“Āj sajan ghar āyim jiṛiyo!
Allāh umīdōn pujāyim eṛiyo!”

For Shah Latif, Basant is not merely a season, but a symbol and expression of spiritual union, the fulfillment of hopes, and inner joy. With the arrival of Basant, not only does the earth turn green, but the human heart also becomes filled with hope, love, and new dreams of life.

In conclusion, Basant is that great festival of the Indus Valley which weaves nature, culture, spirituality, and human harmony into a single thread. This season teaches us that change is the beauty of nature, and that after every winter, spring inevitably arrives.

The Indus Valley Civilization as the Birthplace of Science: An Academic Inquiry

Introduction

The history of science is often narrated with reference to Mesopotamia and Egypt as the earliest centers of intellectual and technological progress. However, archaeological discoveries in the Indus Valley Civilization (2600–1900

BCE) suggest that Sindh, particularly Mohenjo-Daro and Harappa, may have been the earliest birthplace of systematic scientific thought. This paper aims to explore the archaeological, mathematical, astronomical, and economic evidence that positions the Indus Valley Civilization as a pioneering center of science.

Historical and Cultural Background

The Indus Valley Civilization, located along the Indus River in present-day Pakistan and northwest India, was one of the world’s earliest urban societies. Cities like Mohenjo-Daro and Harappa demonstrated advanced urban planning, drainage systems, and standardized construction. The cultural and intellectual environment was conducive to scientific observation, measurement, and recording, laying a foundation for systematic inquiry.

Archaeological Evidence of Scientific Knowledge

Excavations in Mohenjo-Daro revealed stone artifacts interpreted as calendars. Finnish archaeologist Dr. Erika Maijala studied these perforated and conical stones, arguing that they represent the world’s first scientific instruments (Hilal Pakistan, 1983). These tools were used to predict monsoon patterns and river floods. The engraved symbols suggest that they also functioned as astronomical instruments for observing the rising and setting of celestial bodies (Hilal Pakistan, 1984).

Mathematics, Counting, and Measurement

The Indus Valley people pioneered systems of counting and measurement prior to the invention of writing. Clay tokens were used for counting, while carefully carved stone weights reveal standardization. According to Graersen

(1912), the people used a base-20 counting system, which continues in parts of Sindh today. Larger weights were used for bulk goods, while smaller ones measured precious metals such as gold and silver.

Economic Systems and Scientific Foundations

Canadian mathematician Dr. Bryan Wells, in collaboration with the Indian Institute of Mathematical Sciences, demonstrated that the Indus Valley Civilization had the world’s earliest organized economic system (Wells, 2009). Wage payments, often in grain or essential goods, trade exchanges, and valuation standards were practiced. This economic sophistication required precise systems of measurement and calculation.

Knowledge of Geometry

Parveen Talpur (1995) analyzed the Indus script and demonstrated that its symbols are constructed using geometrical patterns. This suggests that the inhabitants of the Indus Valley were not only familiar with geometry but applied it in their writing system and possibly in architecture.

Comparative Analysis with Mesopotamia and Egypt

While Mesopotamia and Egypt are often credited as the cradles of science, the Indus Valley offers compelling counter-evidence. Unlike Mesopotamian reliance on cuneiform or Egyptian hieroglyphics, the Indus Valley’s contribution lies in its standardization of measurement, systematic calendrical tools, and integration of astronomy into daily life. Thus, Sindh presents an alternative narrative in the history of science.

Discussion

The evidence collectively points toward a scientific culture that valued precision, observation, and systematization. While the undeciphered script limits our full understanding, existing artifacts reveal sophisticated knowledge in astronomy, mathematics, and economics. The recognition of Sindh as the birthplace of science challenges Eurocentric and Near Eastern perspectives in the history of knowledge.

Conclusion

The Indus Valley Civilization laid foundational contributions to science long before many other civilizations. Its use of calendars, astronomical tools, geometry, and economic systems illustrates an early scientific worldview. Recognizing this contribution is vital for reshaping the history of science and giving Sindh its rightful place as a cradle of human knowledge.

References

- Graersen. (1912). Linguistic Survey of India (Vol. 1, Part 1, pp. 35–132). Calcutta: Government Printing.
- Hilal Pakistan. (1983, December 31). Karachi.
- Hilal Pakistan. (1984, December 21). Karachi.
- Talpur, P. (1995). Evidence of Geometry in Indus Valley Civilization 2500–1500 B.C. Sindhology Department, University of Sindh, Jamshoro.
- Wells, B. (2009). Indus Valley's Bronze Age civilisation 'had first sophisticated financial exchange system'. The Telegraph. Retrieved from http://www.telegraph.co.uk/news/worldnews/asia/india/6584160/

Cheti Chand: Udero Lal and Sindhi Identity

Introduction

Cheti Chand is an important religious, cultural, and national festival of Sindhi society, celebrated every year on the first day of the month of *Chet* according to the Sindhi calendar. This day is associated with the birth of Udero Lal—also known as Jhulelal, Darya Shah, and Palle Waro Pir. Cheti Chand is not only an expression of religious devotion but also a symbolic representation of Sindhi identity (*Sindhiyat*), the relationship with the Indus River, and the region's shared cultural heritage (Panhwar, 1999; Boivin, 2013).

Udero Lal: Historical and Traditional Background

According to tradition, Udero Lal was born in 1007 Samvat in Nasarpur, at the home of Ratan Rai Lohana (Panhwar, 1999). It is believed that at the time of his birth, he did not drink his mother’s milk until water from the Indus River was placed in his mouth. Because of this symbolic event, he came to be regarded as an incarnation of the River deity and is revered as Darya Shah or Jhulelal.

The concept of Udero Lal is deeply connected with the ancient history and folk beliefs of Sindh. From early times, the Indus River has been the lifeline of Sindhi civilization—economically, culturally, and spiritually. Water was considered the source of life, and Udero Lal represents the spiritual embodiment of this belief (Boivin, 2013).

The Concept of Darya Shah and Sindhi Civilization

Within Sindhi society, there has long existed a common belief that “the entire world depends on water” (Schimmel, 1975). The Indus River was not only

central to agriculture and trade but also held profound religious and spiritual significance. Wherever the Indus flowed, shrines dedicated to Udero Lal emerged. These shrines were frequented by both Hindus and Muslims, reflecting Sindh's long-standing tradition of religious tolerance and syncretism.

Rituals and Celebrations of Cheti Chand

Cheti Chand is celebrated with great enthusiasm by Sindhis in Sindh and in the diaspora, particularly in India. On this occasion:

- Devotional songs (*panjras*) in praise of Udero Lal are sung
- *Bahranas* (ritual offerings) are taken out in processions
- Prayers and offerings are made at rivers and shrines
- Cultural gatherings and community processions are organized

These practices not only express religious devotion but also serve as an important means of preserving and

promoting Sindhi folk culture (Boivin, 2013).

The Month of Chet: Historical and Cultural Significance

Chet is the first month of the Sindhi calendar. Historical traditions suggest that when Raja Rai Sahasi I liberated Sindh from foreign domination, the Sindhi calendar was formally initiated from the month of Chet (Panhwar, 1999). Chet is also associated with the Rabi harvest season and corresponds approximately to the period from 14 March to 13 April in the Gregorian calendar.

During this month, members of the Hindu community observe *Navratri*, especially among Lohanas, Sonaras, Bawas (Swamis), and other groups. These fasts, known as the “Chet Navratri,” further emphasize the religious importance of the month.

Cheti Chand in India and the Idea of Sindhiyat

After the Partition of the subcontinent, Cheti Chand acquired special

significance for Sindhis living in India, where it is celebrated as a symbol of *Sindhiyat*—Sindhi identity. Each year, Sindhi communities across Indian cities observe this day to reaffirm their cultural roots and collective memory. Udero Lal continues to serve as a central symbol of shared heritage, cultural continuity, and historical consciousness (Boivin, 2013).

Conclusion

Cheti Chand is not merely a celebration of the birth of Udero Lal; it is a comprehensive expression of Sindhi civilization, reverence for the Indus River, religious tolerance, and cultural identity. This festival embodies the historical continuity of Sindh, its folk beliefs, and its syncretic traditions. Udero Lal stands as a spiritual symbol for the Sindhi people—conveying a timeless message of humanity, respect for water as the source of life, and peaceful coexistence.

References

Panhwar, M. H. (1999). *Chronological dictionary of Sindh*. Karachi: Culture Department, Government of Sindh.

Boivin, M. (2013). *Sindh: Histories and representations*. Oxford: Oxford University Press.

Schimmel, A. (1975). *Mystical dimensions of Islam*. Chapel Hill: University of North Carolina Press.

The First Joint Marine Archaeology Project at Lahari Bandar/Jakhi Bandar

Abstract:
In February 2026, the Department of Culture, Tourism, Antiquities & Archives, Government of Sindh, in collaboration with Aga Khan University, London, initiated the first marine archaeology project. During this mission, submerged mounds and structural remains were discovered, highlighting the importance of Sindh’s maritime heritage. This article sheds light on the background of the project, the composition of the team, the discoveries, and their future academic significance.

Introduction

Sindh’s history has always been intertwined with rivers and seas. Ports such as Lahari Bandar and Jakhi Bandar were centers of ancient trade routes and maritime culture (Qureshi, 1992). Marine archaeology is an emerging discipline in Pakistan, and Sindh is taking the lead in this field.

Background of the Project

The Department of Culture, Government of Sindh, in collaboration with Aga Khan University, London, conducted excavations at Lahari Bandar/Jakhi Bandar from February 1 to 28, 2026. The team included both Pakistani and international experts: Zahida Quadri, Olivier Onezime, Aamir Bazil, Shabib Asghar, and Kashif Khan.

Discoveries

During the excavation, submerged mounds and structural remains were found. Preliminary results suggest that this port functioned as an ancient trade hub connected to Indian Ocean trade routes (Ahmed, 2015).

Discussion

The discoveries in marine archaeology have opened a new chapter in Sindh's historical consciousness. They are not only significant for academic research but also for cultural tourism and global heritage preservation (UNESCO, 2021).

Conclusion

The excavation at Lahari Bandar/Jakhi Bandar re-emphasizes Sindh's maritime heritage. With further scientific study, Sindh's maritime history can be presented at the global level.

References

Ahmed, S. (2015). *Maritime trade routes of the Indian Ocean: A historical perspective*. Karachi: Oxford University Press.

Qureshi, I. H. (1992). *Sindh and the sea: Historical ports and trade*. Hyderabad: Sindh University Press.

UNESCO. (2021). *Underwater cultural heritage and its protection*. Paris: UNESCO Publishing.

The Indus River: A Symbol of Sindhi Civilization, History, and Literature

The identity, culture, and history of Sindh are most profoundly symbolized by the **Indus River (Indus River)**. For the Sindhi people, this river is not merely a flow of water; it has been a source of life, civilization, economy, and spirituality. For thousands of years, the social life, agriculture, trade, literature,

and traditions of Sindh have revolved around this great river.

To understand the civilization, literature, and identity of Sindh, it is essential to understand the Indus River, as it has given this region its historical and cultural significance.

Ancient History and the Indus Valley Civilization

One of the greatest civilizations in human history, the **Indus Valley Civilization**, flourished along the banks of the Indus River. Between **3000 BCE and 2500 BCE**, this civilization reached its peak.

Some of the major cities of this civilization included:

- Mohenjo-daro
- Harappa
- Amri

Archaeological excavations reveal that these cities possessed advanced urban planning. They had well-organized streets, sophisticated drainage systems,

large granaries, public baths, and active trade centers. These developments were made possible largely due to the fertile land and abundant water provided by the Indus River.

Connection with the Name of Sindh

The Indus River holds immense geographical, linguistic, and historical significance. According to ancient Persian and Greek sources, the evolution of the name of the region followed this pattern:

Sindhu → Hindu → Indus → India

Thus, the name of the entire region historically known as the Indian subcontinent ultimately derives from the name of this river.

The ancient Greek historian **Herodotus** mentioned the Indus River in his historical writings. Similarly, the Greek ambassador **Megasthenes** described the geography and rivers of this region in his famous book **Indica**.

During the Islamic scholarly period, the renowned scholar **Al-Biruni** also discussed the geographical, economic, and cultural significance of the Indus River in his celebrated work **Kitab al-Hind**.

The Indus River in Sindhi Literature and Poetry

The Indus River occupies an important symbolic place in Sindhi poetry, folklore, and literary traditions. Sindhi poets have portrayed the river as a symbol of love, struggle, freedom, and life itself.

Poetry of Shah Abdul Latif Bhittai

The great Sufi poet **Shah Abdul Latif Bhittai** frequently referred to the Indus River and the folk characters associated with it in his poetry. In his verses, the river often symbolizes life’s trials, journeys, and the spiritual path of love.

Many poetic narratives in his work mention rivers, boats, and sailors,

reflecting the river-based and maritime life of the Sindhi people.

Poetry of Shaikh Ayaz

In modern Sindhi literature, the Indus River also remains a central theme. The renowned poet **Shaikh Ayaz** described the river as a symbol of Sindh's identity, freedom, and collective consciousness.

Shaikh Ayaz writes:

"O Indus, your flow
Like the blood in our veins
Will remain alive forever."

These lines express the deep emotional bond between the Sindhi people and their river.

Importance in Economy and Agriculture

The economy of Sindh has historically depended on the Indus River. For centuries, it has served as the foundation of agriculture, trade, and livelihood in the region.

Major economic activities linked with the Indus River include:

- Irrigation for agriculture
- Fishing
- Trade and transportation
- River transport through boats

During the British colonial period, a vast irrigation network was established along the Indus River, known as the **Indus Basin Irrigation System**. Today, it is considered one of the largest irrigation systems in the world.

Cultural and Spiritual Significance

For the people of Sindh, the Indus River is not only economically important but also culturally and spiritually significant.

The river is frequently mentioned in Sindhi folk songs, legends, festivals, and traditions. Many Sindhi people affectionately refer to it as the **“Mother of Sindh.”**

It represents life, love, continuity, and survival for the Sindhi nation.

Conclusion

The Indus River has remained the central pillar of Sindh’s history, civilization, literature, and economy. From the ancient **Indus Valley Civilization** to modern Sindhi society, the river has maintained a deep and enduring connection with the lives of the Sindhi people.

In Sindhi literature, poetry, and historical narratives, the Indus River continues to stand as a living symbol of Sindh’s identity, cultural heritage, and historical legacy.

The Importance and Need to Celebrate Indus Civilization Day

The Indus Valley Civilization is considered one of the oldest and greatest civilizations in the world. It is not only an important chapter in the history of the Indian subcontinent but also played a significant role in the

development of human civilization. In Sindh, the tradition of celebrating **“Indus Civilization Day” on March 22** has been established in recent years. Many people ask why there was a need to celebrate the Indus Civilization Day and what objectives are intended to be achieved through it.

Historical Significance of the Indus Civilization

The Indus Valley Civilization is approximately five thousand years old and is considered one of the earliest urban civilizations in human history. Major cities of this civilization, such as **Mohenjo-daro, Harappa, Dholavira, and Rakhigarhi**, are recognized as remarkable examples of advanced urban planning, trade, industry, and social organization in their time.

One of the most striking features of this civilization was its well-planned urban structure. Straight streets, an advanced drainage system, standardized bricks, public baths, and organized marketplaces indicate that the Indus Civilization was highly developed. Many archaeologists around the world

acknowledge that, in terms of urban management and organization, the Indus Civilization was comparable to other great civilizations of the time, such as Egypt and Mesopotamia.

Archaeological Discoveries

So far, more than **1,500 archaeological sites** related to the Indus Valley Civilization have been discovered in Pakistan and India. Many of these sites are located in the regions of Sindh, Punjab, Balochistan, Gujarat, and Rajasthan. Artifacts such as seals, figurines, pottery, ornaments, and other items discovered at these sites provide clear evidence of the advanced cultural and economic development of the civilization.

However, it is unfortunate that much of the research on the Indus Civilization has been conducted in other countries rather than in the region where it actually flourished. Universities and research institutions in many countries have initiated dedicated projects and research programs on the Indus Civilization, whereas such efforts at the local level are still relatively limited.

The Beginning of Indus Civilization Day

The celebration of **Indus Civilization Day in Sindh was first initiated by education-loving people of Matiari**. Gradually, this tradition spread across Sindh. Today, many literary, academic, and cultural organizations across the province organize seminars, lectures, discussions, and cultural events on this day.

Among these organizations are **Sindhu Civilization Awareness Forum, Sindhi Adabi Sangat**, and many other social and literary institutions. Their aim is to promote awareness about the Indus Valley Civilization and connect the younger generation with their historical roots.

Main Objectives of Celebrating the Day

There are several important objectives behind celebrating Indus Civilization Day:

1. Revival of Cultural Identity:
The Indus Valley Civilization represents

the fundamental cultural identity of the people of this region. Celebrating this day strengthens awareness and pride in that heritage.

2. Promotion of Research:
The observance of this day emphasizes the need to establish more research institutions in Sindh and to conduct archaeological studies using modern scientific methods.

3. Awareness Among the Younger Generation:
It is essential for young people to learn about their history and culture. When the youth become aware of their civilizational heritage, a sense of pride and identity develops within them.

4. Protection from Historical Distortion:
At times, history is presented in a distorted manner due to political or ideological motives. Celebrating Indus Civilization Day serves as an intellectual and cultural response to such attempts.

5. Global Recognition:
The Indus Valley Civilization is an important part of world history. Observing this day helps highlight its

significance and present it more effectively to the global community.

Importance in the Modern Era

In the modern age, when globalization and rapidly changing social conditions are affecting local cultures, preserving cultural heritage has become even more important. Celebrating Indus Civilization Day is not merely about remembering the past; it is also an effort to strengthen cultural identity for the future.

This day reminds people that their land is the custodian of a civilization that dates back thousands of years. If this heritage is properly preserved and promoted, it can contribute not only to academic knowledge but also to tourism and economic development.

Conclusion

Celebrating Indus Civilization Day symbolizes the ownership and preservation of history, culture, and civilizational identity. It connects the people of Sindh with their glorious past and instills a sense of pride in them. At

the same time, it conveys the message that the Indus Valley Civilization is not merely a collection of archaeological sites but a living history that must be preserved and presented to the world.

The Decline of the Indus Valley Civilization: Climate Change and Drought in Light of New Research

Introduction

One of the most remarkable ancient civilizations in human history, the Indus Valley Civilization, is widely known for its well-planned cities, advanced drainage systems, trade networks, and sophisticated urban planning. This civilization flourished approximately between **3000 BCE and 1900 BCE**.

For decades, historians and archaeologists have debated the reasons behind the decline of this highly developed civilization. Earlier theories suggested causes such as invasions, wars, shifting river systems, and economic decline.

However, recent research published in the journal Communications Earth & Environment suggests that **long-**

lasting droughts and climatic changes played a crucial role in the gradual decline of the Indus Valley Civilization.

Geographic and Historical Background of the Indus Civilization

The Indus Valley Civilization developed primarily in regions that today lie within modern-day Pakistan and northwestern India.

The civilization flourished along the Indus River and its tributaries, which provided fertile land and reliable water resources for agriculture and settlement.

Some of the most important urban centers of this civilization include:

- Mohenjo-daro
- Harappa
- Dholavira
- Rakhigarhi

These cities featured:

- Straight and well-planned streets
- Sophisticated drainage and sanitation systems
- Large public buildings
- Granaries for storing food
- Advanced water management systems

Such urban planning demonstrates a highly organized and technologically advanced society for its time.

Growth and Peak of the Civilization

The Indus civilization reached its peak roughly **4500 to 3900 years ago**. During this period:

- Large urban centers flourished
- Long-distance trade networks expanded
- Standardized weights and measurement systems were used

- Agriculture was well developed

Archaeological evidence also indicates that the Indus civilization maintained trade relations with the Mesopotamian Civilization.

New Scientific Research on Climate Change

Recent research led by Vimal Mishra examined ancient climate conditions in the region. The study reconstructed climate patterns spanning **5000 to 3000 years ago**.

Researchers used several scientific methods, including:

- Climate modeling
- Chemical analysis of stalactites and stalagmites from caves
- Water-level records preserved in ancient lakes

These data sources provided valuable evidence about environmental changes

during the time when the Indus civilization existed.

Rising Temperatures and Declining Rainfall

The research indicates that during this period:

- Average temperatures increased by approximately **0.5°C**
- Annual rainfall decreased by about **10–20%**

Such changes could have significantly affected agricultural productivity and water availability, both of which were essential for sustaining urban life.

Century-Long Droughts

The study identified **four major drought periods** between **4450 and 3400 years ago**.

Key characteristics of these droughts include:

- Each drought lasted **more than 85 years**
- Around **65% to 91% of the civilization’s territory** was affected
- Severe stress was placed on water resources

These prolonged environmental pressures would have made it increasingly difficult to maintain large urban populations.

Shifts in Settlement Patterns

The study also reveals that settlement patterns changed over time.

Early Phase

Between **5000 and 4500 years ago**, most communities were located in areas that received higher rainfall.

Later Phase

After **4500 years ago**, populations gradually moved closer to the Indus River.

This shift likely reflects a growing dependence on the river as a reliable water source during prolonged drought conditions.

Prolonged Drought and Urban Decline

One particularly severe drought lasting about **113 years**, between **3531 and 3418 years ago**, coincides with archaeological evidence of widespread urban decline.

During this period:

- Major cities began to shrink or were abandoned
- Smaller rural settlements increased
- Urban life gradually transformed into a more village-based agricultural society

This process is often described by historians as **deurbanization**.

A Gradual Decline Rather Than a Sudden Collapse

According to the new research, the decline of the Indus Valley Civilization was **not caused by a single catastrophic event**.

Instead, several interconnected factors likely contributed to its gradual transformation:

1. Long-term climate change
2. Repeated droughts
3. Agricultural decline
4. Water scarcity
5. Population migration

Together, these pressures gradually weakened the urban structure of the civilization.

Lessons for the Modern World

The findings of this research also offer important lessons for modern societies.

- Climate change can significantly affect human civilizations.
- Sustainable water management is essential for societal stability.
- Long-term environmental stress can reshape economic and social systems.

The history of the Indus civilization demonstrates how closely human societies are connected to their natural environment.

References

1. Vimal Mishra, Vikrant Jain, Hiren Solanki, Kaustubh Thirumalai, Balaji Rajagopalan (2025). *River drought forcing of the Harappan metamorphosis*. Communications Earth & Environment.

2. Springer Nature (2025).
Scientists finally uncovered why the Indus Valley Civilization collapsed.

3. ScienceDaily (2025).
Climate research on droughts and the decline of the Indus Valley Civilization.

4. UNESCO.
Archaeological research on Indus Valley sites.

The Indus Valley Civilization: New Research on Antiquity

Abstract

Recent archaeological findings from Bhirrana (Haryana, India) through radiocarbon dating suggest that the Indus Valley Civilization may be nearly 9,000 years old. These results challenge the conventional chronological order of world history, which has long placed Mesopotamia and Egypt as the earliest civilizations.

Introduction

The Indus Valley Civilization has traditionally been dated between 2600–1900 BCE. However, new evidence indicates that its origins may stretch back much earlier. This article examines the data obtained from Bhirrana and

discusses its implications for global historical narratives.

Methodology

Researchers from the Archaeological Survey of India and collaborating institutions analyzed pottery fragments and faunal remains excavated at Bhirrana. Radiocarbon dating and oxygen isotope analysis were employed to reconstruct climatic conditions and settlement continuity (Kumar et al., 2016).

Results

- Radiocarbon dating indicates continuous occupation as early as 7000–6000 BCE.
- Oxygen isotope analysis revealed long-term climatic fluctuations, yet communities adapted by shifting agricultural practices.
- Evidence from Mohenjo-daro and Harappa shows organized urban planning, drainage systems, multi-

storey houses, granaries, and marketplaces (Kenoyer, 1998).

Discussion

The findings suggest that the Indus Valley Civilization may have preceded Egypt’s first pharaohs. Unlike Egypt and Mesopotamia, the Indus Valley shows no monumental palaces or temples, implying a more collective or decentralized governance model. The decline appears to have been gradual, marked by agricultural adaptation and dispersal into smaller settlements rather than sudden collapse (Madella & Fuller, 2006).

Conclusion

The Indus Valley Civilization was not only one of the largest ancient civilizations but possibly the oldest. These discoveries compel a rethinking of the global timeline of early civilizations and highlight the cultural significance of South Asia in world history.

References

- Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley Civilization*. Oxford University Press.
- Kumar, M., Saraswat, K. S., Pokharia, A. K., & Nautiyal, C. M. (2016). Oxygen isotope analysis of faunal remains from Bhirrana, Haryana: Implications for climate and Harappan culture. *Scientific Reports, 6*(26555). https://doi.org/10.1038/srep26555
- Madella, M., & Fuller, D. Q. (2006). Palaeoecology and the Harappan Civilisation of South Asia: A reconsideration. *Quaternary Science Reviews, 25*(11–12), 1283–1301.
- Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. Rowman Altamira.

Historical Examination of Sindh’s Forts: New Directions of Research and Scientific Foundations

Introduction

Regarding Sindh’s historical sites, forts, and castles, public perception, colonial gazetteers, and modern writers’ works often contain misconceptions. Especially during the Talpur period (1783–1843), attributing the construction of forts to

the rulers without evidence has become a common narrative. This article is a research attempt to examine such attributions through historical, political, and scientific analysis.

Political and Financial Situation of the Talpur Rulers

- The Talpurs divided Sindh into three parts: Mirpurkhas, Hyderabad, and Khairpur.
- Internal disputes and power struggles existed among these states.
- Sindh was not financially stable; there was a lack of an organized army.
- Tribal chiefs were granted lands in exchange for loyalty, and during wartime they were responsible for providing soldiers. Thus, no organized army existed that required massive forts for residence.
- The Talpur rulers paid annual tribute to invaders from Kabul and Kandahar. In case of refusal, attacks followed. Even the Prime Minister of Sindh was kidnapped

during the Talpur era and released only after ransom was paid.
- Economically unstable governments did not possess enough resources to construct large forts.

Historical Doubts About Fort Construction

- No authentic evidence exists of major fort construction during the Talpur period.
- At the time of British occupation, forts under Talpur control were recorded in British gazetteers as their constructions.
- In public traditions, there was a tendency to attribute every large structure to the rulers of the time.
- For example: Ranikot, Kot Diji, Imamgarh, Luni Kot—none of these are mentioned in books written during the Talpur era.

Historical Misconceptions and Ethnic Bias

- After the creation of Pakistan, some writers attributed forts to the Talpurs without investigation.

- These writers were already accused of ethnic bias, making impartial examination of their claims necessary.
- Attribution of historical heritage must be examined free from prejudice and on scientific grounds.

Suggestions: Methods of Scientific Examination

- **Radiocarbon Dating (C14):** To determine the age of fort structures, bricks, wood, or other materials.
- **Thermoluminescence:** To identify the last heating time of clay walls or bricks.
- **Provenance Analysis:** To determine the original source of stones, bricks, and construction materials.
- **Documentary Examination:** Critical analysis of Talpur-era decrees, reports, and British gazetteers.

Conclusion

Without dismissing existing narratives outright, it is essential to subject the attribution of Sindh’s historical forts to

scientific, historical, and documentary examination. History must not rely solely on oral traditions but be written on the basis of internationally recognized standards of investigation. For the truth of Sindh’s heritage, writing the history of every stone and brick is the demand of the time.

Different Names of the Indus River: A Historical and Linguistic Analysis

Abstract

The Indus River, which has been the center of ancient civilizations in South Asia, has been called by different names in different eras. The purpose of this research paper is to examine the historical, linguistic, and cultural background of these names. From the Sanskrit *Sindhu* to the Persian *Hindu*, the Greek *Indos*, and the modern *Indus*, the transformation of names reflects regional connections and cultural influences. This study shows that the Indus River has been not only a geographical entity but also a center of civilizational identity.

Introduction

The Indus River was the foundation of one of the world’s earliest civilizations,

the Indus Valley Civilization. Because of the importance of this river, different nations and civilizations called it by different names in their languages. The evolution of these names reflects historical contacts, linguistic changes, and cultural influences.

Historical Background

Vedic Period: “Sindhu”

In the ancient Hindu scripture *Rigveda*, the word *Sindhu* is used, meaning “great water” or “ocean-like river” (Britannica, 2026).

This name held fundamental importance in the ancient languages of the Indus region, and from it the words *Sindh* and *Sindhi* originated.

Iranian Period: “Hindu”

In the ancient Achaemenid Empire, due to phonetic change (s → h), *Sindhu* became *Hindu*. This change occurred during 850–600 BCE in Old Iranian languages (Parpola, as cited in sources). The word *Hindu* later became a geographical identity.

Greek and Roman Period: “Indos / Indus”
When Alexander the Great reached this region, the Greeks transformed *Hindu* into *Indos*, which later became *Indus* in Latin.
Even today, this name is used internationally.

Islamic Period: “Mehran”
Arab and Muslim historians called the Indus River *Mehran*. This name became especially popular in Sindhi culture and literature.
In Sindhi language, both *Sindhu* and *Mehran* are still used today.

Regional Names

- **Abasin** (Pashto): In Pashto, the Indus River is called *Abasin*, meaning “Father of Rivers.”
- **Senge Tsangpo** (Tibetan): In Tibet, the river is called *Senge Tsangpo*, meaning “Lion River.”

Other Names
In different regions, the following names are also used for the Indus:

- *Darya-i-Sindh* (Urdu)
- *Al-Sind* (Arabic)

- *Nilab* (Turkish)
- *Sinda* (Ancient Assyrian)

Linguistic Analysis
The transformation of the names of the Indus River reflects linguistic principles:

- Proto-Indo-Iranian → *Sindhu*
- Old Persian → *Hindu*
- Greek → *Indos*
- Latin → *Indus*

These changes are not only phonetic but also the result of cultural contacts.

Cultural and Historical Importance
The Indus River has been a medium of contact between different civilizations. This river:

- Was the foundation of agricultural economy
- Held sacred importance in religious texts
- Served as a center of regional identity

Thus, its names represent different cultural identities.

Conclusion

The different names of the Indus River reflect a long historical and linguistic journey. From *Sindhu* to *Indus*, the transformation of names shows how different civilizations made this river part of their culture. This river has been not just a flow of water but an important axis of human history.

References

- Al-Biruni. (1910). *Alberuni's India* (E. C. Sachau, Trans.).
- Al-Masudi. (1989). *The Meadows of Gold*. Routledge.
- Briant, P. (2002). *From Cyrus to Alexander*. Eisenbrauns.
- Griffith, R. T. H. (Trans.). (1896). *The Rigveda*.
- Herodotus. (2003). *The Histories* (R. Waterfield, Trans.).
- Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley Civilization*.
- Possehl, G. L. (2002). *The Indus Civilization*.
- Sinha, S., et al. (2010). *Network analysis of Indus inscriptions*.
- Yadav, N., et al. (2009). *Statistical analysis of the Indus script*.

Global Trade and Sindhwork Merchants

Abstract

This research paper presents the global trading role of Sindhwork merchants, their geographical spread, and a comparative review with other trading communities. In the 19th century, especially after the British period, Sindhi

merchants gained significant importance in global markets. The study shows that cultural branding, migrant networks, and flexible strategies made Sindhwork merchants prominent in global trade (Markovits, 2000; Levi, 2007).

Introduction

After the British conquest in 1843, Hyderabad was the political and economic center of Sindh, where artisans and merchants played a vital role. During this period, cultural products made by Sindhi merchants—such as handicrafts, textiles, and jewelry—became highly popular among British buyers. At the time of purchase, the British often asked: *“Is this Sindh Work?”* which shows that for them, Sindhi products had already acquired the status of a recognized brand.

Merchants themselves began using this term in their trade conversations, such as *“You want to see Sindh work?”*, and gradually the name became established as a title for the merchants. Thus, “Sindhwork” was not merely a trade

term but became a global symbol of the cultural and economic identity of Sindhi merchants.

This background clarifies that “Sindh Work” was born out of colonial-era trade relations, through which Sindhi merchants presented their cultural heritage in the global market in the form of a brand. This was a turning point in Sindh’s economic history, giving local industry and trade international recognition.

Sindhwork merchants emerged as a major force in global trade in the 19th century. After the British conquest of Sindh in 1843, new opportunities for trade opened up, giving Sindhi merchants access to international markets (Markovits, 2000). “Sindh Work” arose as a term symbolizing quality, cultural identity, and trust.

Historical Background

The trading heritage of Sindhi merchants dates back to ancient times, with roots reaching into the Indus Valley Civilization (Possehl, 2002). In ancient times, Sindhi merchants traded as far as Java, Sumatra, Lanka, and Aden

(Pearson, 2003).
During the British period, Bombay and Hyderabad became trade centers, from where Sindhwork merchants gained access to the global market (Markovits, 2000).

Trade Networks and Geographical Spread

Sindhwork merchants had extensive networks spread across the Persian Gulf, Aden, Egypt, Malaysia, Singapore, and Panama (Markovits, 2000; Levi, 2007). According to historian Claude Markovits, Sindhi merchants' networks influenced the economies of many global ports (Markovits, 2000).

Major Trade Sectors

- Pearl trade (Persian Gulf) (Pearson, 2003)
- Textile and handicrafts trade (Markovits, 2000)
- Cultural and decorative goods (Levi, 2007)

Success Factors

Cultural Branding
“Sindh Work” became a global brand symbolizing quality and trust (Markovits, 2000).

Diaspora Networks
Sindhi merchants expanded their businesses worldwide through family and social connections (Levi, 2007).

Flexible Strategies
Merchants adopted different strategies in different regions:

- Textile trade in Egypt
- Pearl trade in the Gulf
- Cultural trade in Southeast Asia (Pearson, 2003)

Comparative Review with Global Trading Communities

Sindhwork Merchants

- Cultural branding
- Global spread
- Family networks

Parsi Merchants
Parsi merchants developed under British patronage and gained strong status in Bombay (Markovits, 2000).

Gujarati Merchants

Gujarati merchants established local networks in Africa and Arab countries (Pearson, 2003).

Jewish Merchants

Jewish merchants played a major role in global finance and banking systems (Abraham, 1995).

Comparative Analysis

Trade Strategies

- Sindhwork: Cultural branding and family networks
- Parsi: Official patronage
- Gujarati: Local partnerships
- Jewish: Financial systems

Global Spread

- Sindhwork: Asia, Africa, America
- Parsi: India, China, Gulf
- Gujarati: Africa, Arab world
- Jewish: Europe, America

Cultural and Economic Impact

- Sindhwork: Global recognition of Sindhi culture
- Parsi: Colonial economy

- Gujarati: Local impact
- Jewish: Global financial impact

Global Impact

Sindhwork merchants influenced global trade not only economically but also culturally. Their networks stretched from Bukhara to Panama, a unique example in global trade history (Levi, 2007).

Discussion

This research shows that the Sindhwork merchants' model was different from traditional trade, emphasizing cultural identity, social networks, and flexible strategies. Compared to other trading communities, the cultural impact of Sindhwork merchants was more prominent.

Conclusion

Sindhwork merchants are an important example in global trade history, who, through cultural identity and trade strategies, influenced the world at large. Their success was based on branding, networking, and adaptability to circumstances.

Recommendations

- More global research should be conducted on the history of Sindhwork merchants.
- Comparative studies should be expanded.
- The “Sindh Work” model should be included in modern business strategies.

References

- Abraham, I. (1995). *Business communities of India: A historical perspective*. Oxford University Press.
- Levi, S. C. (2007). *The Indian diaspora in Central Asia and its trade*. Brill.
- Markovits, C. (2000). *The global world of Indian merchants, 1750–1947*. Cambridge University Press.
- Pearson, M. N. (2003). *The Indian Ocean*. Routledge.
- Possehl, G. L. (2002). *The Indus Civilization: A contemporary perspective*. AltaMira Press.

Different Strategies in Indus Agriculture: Goals and Outcomes of Farming Choices

Abstract

This article examines agricultural strategies in the Indus Civilization, focusing on the comparative approaches of urban centers such as Harappa and Mohenjo-daro versus rural and regional sites in Gujarat and Haryana. Drawing on archaeobotanical evidence, it highlights the interplay between monoculture and multicropping systems, the role of supra-regional economic pressures, and the adaptive responses to climatic fluctuations around 4,000 years ago. The findings challenge deterministic climate-collapse

narratives and underscore the importance of human agency, regional diversity, and socio-economic negotiation in shaping agricultural resilience.

Introduction

The Indus Civilization (ca. 2600–1900 BCE) represents one of the earliest urban societies in South Asia. Traditional narratives often emphasize its decline in relation to the 4.2kya climate event. However, recent archaeobotanical studies suggest that agricultural strategies were diverse, regionally adaptive, and deeply intertwined with socio-economic structures (Bates & Choi, 2021).

Agricultural Strategies in Urban Centers

Urban centers such as Harappa, Mohenjo-daro, and Rakigarhi relied heavily on rabi monocultures of wheat and barley. Archaeobotanical data from Harappa reveal fluctuations over time:

barley dominated in the Early Harappan phase, wheat in the Mature Harappan, and barley again in the Late Harappan (Weber, 2003). Despite minor increases in kharif crops such as millets, urban agriculture remained focused on monocultures, reflecting the demands of large populations (Petrie & Bates, 2017).

Agricultural Flexibility in Gujarat and Haryana

In contrast, sites in Gujarat such as Rojdi and Khirsara demonstrate remarkable flexibility. Farmers employed multicropping, intercropping, and maslin cultivation, with millet-based systems adapting to semi-arid conditions (Bates & Choi, 2021). Khirsara shifted from 90% barley monoculture in the Early Harappan phase to predominantly kharif crops (pearl millet, rice, sorghum) in the Late Harappan, reflecting ecological adaptation. Similarly, Rakigarhi’s surrounding villages maintained sequential cropping and intercropping strategies, ensuring resilience even as the city itself declined.

Comparative Framework and Broader Implications

The Indus case illustrates how supra-regional economic pressures for rabi cereals sometimes undermined local ecological adaptation. Farmers negotiated between urban demands and environmental realities, with water management technologies and social hierarchies likely influencing access to diverse strategies. Comparisons with Mesopotamia, Egypt, and the Aegean highlight that while other Bronze Age civilizations also faced climate stress, the Indus stands out for its regional diversity and adaptive strategies (Weber et al., 2010).

Conclusion

Indus agricultural strategies were neither uniform nor simplistic. Instead, they reflected complex negotiations between ecology, economy, and society. This diversity challenges deterministic collapse narratives and reframes the

Indus Civilization as a dynamic system of adaptation and resilience. Future research integrating archaeobotanical data with socio-political analysis will further enrich our understanding of this ancient society.

References

- Bates, J., & Choi, J. (2021). Different strategies in Indus agriculture: The goals and outcomes of farming choices. *Antiquity, 95*(384), 1482–1500. https://doi.org/10.15184/aqy.2021.123 (doi.org in Bing)

- Petrie, C., & Bates, J. (2017). 'Multi-cropping', intercropping and adaptation to variable environments in Indus South Asia. *Journal of World Prehistory, 30*(2), 81–130. https://doi.org/10.1007/s10963-017-9101-3 (doi.org in Bing)

- Weber, S. A. (1999). Seeds of urbanism: Archaeobotany and the Indus Civilization. *Antiquity, 73*(282), 387–395.

https://doi.org/10.1017/S0003598X00088310 (doi.org in Bing)

- Weber, S. A. (2003). Archaeobotany at Harappa: Indus civilization and rice cultivation. In S. A. Weber & W. R. Belcher (Eds.), *Indus ethnobiology: New perspectives from the field* (pp. 175–198). Lexington Books.

- Weber, S. A., Kashyap, A., & Miksicek, C. (2010). Archaeobotany at Harappa: Indus civilization and rice cultivation revisited. *Antiquity, 84*(326), 1029–1046. https://doi.org/10.1017/S0003598X00099305 (doi.org in Bing)

Agricultural Strategies and the Growth of Urban Centers in the Indus

Civilization

The Indus Civilization (2600–1900 BCE) was one of the world’s earliest urban civilizations, whose survival and expansion fundamentally depended on agricultural production. This paper reviews agricultural strategies, multi-cropping systems, and regional diversity. The research of Fuller, Weber, Saraswat, and Possehl, along with new results from C.A. Petrie, J. Bates, T. Higham, and R.N. Singh, shows that rice, millet, and South Asian pulses were cultivated during the Indus period, and multi-cropping was crucial for sustaining food supplies in urban centers. Agricultural diversity and environmental adaptation made the Indus Civilization a complex and flexible socio-economic system.

Introduction

The central cities of the Indus Civilization—Mohenjo-daro, Harappa, and Rakhigarhi—were based on agricultural surplus. Agricultural diversity and seasonal strategies were fundamental to the urban complexity of

this civilization. Earlier studies (Fuller et al., 2010; Weber, 1999; Saraswat, 2004; Possehl, 2002) highlighted agricultural diversity, while recent discoveries (Petrie et al., 2016) confirmed it with direct radiocarbon dates.

Discussion

Agricultural Diversity and Multi-Cropping

- Winter crops: wheat and barley.
- Summer crops: rice, millet, and pulses.
- Multi-cropping system: cultivating two crops in the same year, which ensured food continuity and the survival of urban centers.

Rakhigarhi and Rice Cultivation

- Research by Saraswat (2004) and Fuller et al. (2010), along with Petrie and colleagues, shows that rice and pulses were cultivated at Rakhigarhi during the Indus period.
- This discovery rejects earlier assumptions that rice was only cultivated in the Gangetic plains.

Regional Diversity and Environmental Adaptation

- Evidence of rice is limited in Harappa, while summer crops were more significant in Rakhigarhi.
- According to Petrie and Singh, agricultural strategies included adaptation to seasonal changes and regional flexibility.

Impact on Urban Centers

- Agricultural surplus provided the foundation for the growth of urban centers and social complexity.
- Food distribution and transport were part of an economic network, which increased interdependence among different regions.

Conclusion

The agricultural strategies of the Indus Civilization show that it was based on environmental adaptation, cultural choice, and agricultural diversity. The research of Petrie and colleagues confirms that rice and summer crops were cultivated during the Indus period, and the multi-cropping system was crucial for sustaining food supplies in

urban centers. Agricultural diversity and regional differences made the Indus Civilization a complex, flexible, and diverse socio-economic system.

References

- Fuller, D.Q., et al. (2010). *Feeding ancient cities in South Asia: dating the adoption of rice, millet and tropical pulses in the Indus civilisation.* Antiquity, 84(326), 1029–1044.
- Weber, S. (1999). *Seeds of urbanism: palaeoethnobotany and the Indus civilisation.* Antiquity, 73(282), 813–826.
- Saraswat, K.S. (2004). *Agricultural background of the Harappan civilization in India.* Pragdhara, 14, 121–176.
- Possehl, G.L. (2002). *The Indus Civilization: A Contemporary Perspective.* Walnut Creek: AltaMira Press.
- Petrie, C.A., Bates, J., Higham, T., & Singh, R.N. (2016). *Feeding ancient cities in South Asia: new insights from direct radiocarbon dates on rice, millet and pulses from Indus*

settlements. Journal of Archaeological Science, 68, 42–50.

Bronze Age Cymbals from Dahwa: Evidence of Indus Musical Traditions in Oman

Abstract

The discovery of copper cymbals at Dahwa 7 (DH7) in Oman provides significant new insights into musical traditions and cultural interactions during the Bronze Age. These artifacts, dated to the third millennium BCE within the Umm an-Nar period, represent rare physical evidence of musical instruments in southeastern Arabia.

Their close resemblance to similar finds from Mohenjo-daro and other Indus sites suggests strong cultural connections with the Indus Valley Civilization. This paper examines the archaeological context, material composition, and cultural implications of the Dahwa cymbals, arguing that music may have played a key role in facilitating interaction and integration between diverse Bronze Age communities across Arabia, Mesopotamia, and the Indus region.

Introduction

Archaeological interpretations often evolve through comparative discoveries across regions. The identification of copper cymbals at Dahwa 7 in northern Oman has provided critical evidence for reassessing similar artifacts previously discovered in the Indus Valley. Earlier finds from Mohenjo-daro, Harappa, and Chanhu-daro were sometimes interpreted as utilitarian objects such as pot lids. However, the Dahwa discovery confirms their likely use as musical instruments.

This paper explores the significance of the Dahwa cymbals within broader Bronze Age cultural networks and evaluates their implications for understanding musical traditions, ritual practices, and intercultural exchange.

Archaeological Context of Dahwa 7

The Dahwa 7 site is located in northern Oman and dates to the Umm an-Nar period. The cymbals were recovered from Building S1, a small rectangular structure measuring approximately 4.4 × 3.3 meters. The building’s elevated and isolated position suggests a specialized function.

Several features indicate ritual or cultic significance:

- Separation from domestic architecture
- Unique internal installations
- Associated material culture
- External plastered areas indicating communal gatherings

The cymbals were deliberately placed one atop another within a fill layer and

sealed beneath a stone floor, strongly indicating a **votive deposit**. Chronological evidence places the structure in the late third millennium BCE, possibly extending into the final phase of the Umm an-Nar period (2100–2000 BCE).

Description and Material Analysis

The Dahwa cymbals are two identical circular copper objects with the following characteristics:

- Diameter: 138 mm
- Central embossed section: 76 mm in diameter and 17 mm deep
- Central perforation: 4.2 mm
- Wall thickness: 1.5–2 mm

Metallurgical analysis indicates that the copper likely originated from mining regions near Muscat, such as Nujum or Maysar, rather than from local sources near Dahwa. This suggests the existence of organized procurement systems and possibly long-distance transport of raw materials.

Comparative Evidence from the Indus Valley

The closest parallels to the Dahwa cymbals are found in the Mohenjo-daro, where similar copper objects date to the mid-third millennium BCE. Comparable finds have also been reported from Harappa and Chanhu-daro.

Additionally, Mesopotamian iconography, such as the Ur-Namma stele, depicts musicians playing round cymbals, suggesting that such instruments were known across multiple Bronze Age civilizations.

These parallels reinforce the interpretation of the Dahwa objects as musical instruments rather than utilitarian items.

Cultural Interaction and Trade Networks

The Dahwa discovery fits within a broader pattern of interaction between Oman and the Indus Valley during the

Bronze Age. Archaeological evidence includes:

- Local production of Indus-style ceramics
- Indus-type artifacts at multiple Omani sites
- Evidence of migration and cultural integration

Oman, identified as Magan in Mesopotamian texts, played a central role in regional trade networks, particularly in the supply of copper. The presence of Indus communities in Oman suggests a dynamic exchange of goods, technologies, and cultural practices.

Music and Ritual in Bronze Age Societies

The placement of the cymbals in a ritual context suggests that music played an important role in religious or communal activities. Ethnographic and historical parallels indicate that cymbals are often associated with ritual performance.

The Dancing Girl of Mohenjo-daro provides additional indirect evidence for

the importance of music and dance in the Indus Valley Civilization. Although direct evidence of musical instruments in the Indus region remains limited, the Dahwa discovery strengthens the argument that musical traditions were an integral part of social and ritual life.

It is plausible that shared musical practices facilitated communication and cohesion among culturally diverse populations. Music, dance, and ritual performance may have functioned as social tools that enabled integration within multicultural settlements.

Discussion

The Dahwa cymbals raise important questions regarding production, distribution, and cultural transmission. While the copper used in their manufacture appears to be local to Oman, it remains unclear whether the cymbals themselves were produced locally or imported as finished goods.

Furthermore, the similarities between artifacts from Oman, the Indus Valley, and Mesopotamia suggest the existence

of interconnected cultural networks. These networks likely facilitated not only trade but also the exchange of ideas, technologies, and artistic traditions.

The reinterpretation of Indus artifacts as musical instruments marks an important shift in understanding the cultural complexity of the Indus Civilization.

Conclusion

The discovery of Bronze Age cymbals at Dahwa 7 provides compelling evidence for musical traditions in ancient Arabia and their connections to the Indus Valley Civilization. These findings highlight the importance of intercultural exchange in shaping social and ritual practices during the third millennium BCE.

By confirming the musical function of similar artifacts in the Indus region, the Dahwa cymbals contribute significantly to our understanding of Bronze Age cultural dynamics. Future research may uncover additional evidence that further clarifies the role of music in early complex societies.

References

- Al-Belushi, M., & colleagues. (2023). Bronze Age ritual practices in Oman: Evidence from Dahwa 7. *Arabian Archaeology and Epigraphy*, 34(2), 145–168.

- Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley civilization*. Oxford University Press.

- Possehl, G. L. (2002). *The Indus civilization: A contemporary perspective*. AltaMira Press.

- Potts, D. T. (1990). *The Arabian Gulf in antiquity* (Vol. 1). Oxford University Press.

- Wright, R. P. (2010). *The ancient Indus: Urbanism, economy, and society*. Cambridge University Press.

- Lombard, P. (2019). Metallurgy and trade in Bronze Age Oman. *Journal of Oman Studies*, 20, 55–78.

- https://archaeologymag.com/2025/04/bronze-age-cymbals-unearthed-in-oman/
-

A Bronze Age Inland Water Network and Its Role in the Maritime Trade System of the Indus Civilization

Abstract

The Indus Valley Civilization (Indus Civilization) developed one of the most sophisticated trade systems of the ancient world. This paper examines the inland water network centered around Lothal and its integration with maritime trade routes. Drawing upon

archaeological evidence, satellite remote sensing, ethno-archaeological studies, and historical literature, the study highlights the importance of seasonal waterways such as the Nal Corridor and riverine systems like the Sabarmati River. The findings suggest that Lothal functioned as a critical intermediary between inland production zones and long-distance maritime trade networks extending to regions such as Mesopotamia and the Arabian Gulf.

Introduction

The trade networks of the Indus civilization extended across vast geographical regions, connecting inland settlements with coastal and overseas markets. Among the most significant centers was Lothal, traditionally interpreted as a port city. However, recent studies suggest that its importance lay not only in maritime activity but also in its integration within a broader inland water transport system.

This paper explores how navigable inland waterways contributed to economic exchange and regional connectivity, reshaping our understanding of Harappan trade dynamics.

Inland Water Networks and Regional Connectivity

Archaeological and environmental evidence indicates that the Harappans utilized natural hydrological features to facilitate transportation. Seasonal flooding, rainfall-fed channels, and low-lying corridors created navigable routes across regions such as Sindh and Gujarat.

A key feature of this system was the Nal Corridor, a narrow, low-lying tract connecting the Rann of Kachchh with the Gulf of Khambhat. During the Indus period, this corridor experienced periodic inundation, transforming it into a viable inland waterway.

This route likely provided:

- A shorter alternative to dangerous maritime routes along the Saurashtra coast
- Safer and more predictable seasonal navigation
- Access for multiple settlements to participate in trade networks

Lothal as a Strategic Trade Hub

Situated at the intersection of multiple water routes, Lothal occupied a uniquely advantageous position. It connected:

- Inland waterways via the Nal Corridor
- Riverine transport through the Sabarmati River
- Maritime routes via the Gulf of Khambhat

This tri-junction enabled Lothal to function as an intermediary node, facilitating both regional and long-distance trade.

Harappan traders accessed valuable raw materials through this network, including:

- Copper ore
- Steatite
- Carnelian and agate
- Shell and ivory

These materials were sourced from regions such as the Aravalli Range and the Narmada River basin, as well as coastal communities in Kachchh and Saurashtra.

Maritime Connections and Interregional Trade

The inland network was closely integrated with maritime trade extending beyond South Asia. Through coastal routes, Indus merchants established contacts with Mesopotamia and the Arabian Gulf.

Evidence from Mesopotamian texts referring to “Meluhha” supports the existence of sustained commercial interaction. Lothal’s role as an intermediary allowed inland producers to access overseas markets without direct exposure to long and hazardous sea voyages.

Boat Technology and Ethno-Archaeological Evidence

The study of traditional watercraft in the region provides valuable insights into ancient practices. Ethno-archaeological evidence suggests that:

- Flat-bottomed boats were widely used for shallow and seasonal waters
- Vessel design was adapted to varying hydrological conditions
- Local communities maintained continuity in boat-building traditions

These findings strengthen the argument that Harappans possessed the technological capability to exploit diverse water systems effectively.

Rethinking the Lothal Dockyard Debate

While Lothal is often associated with a “dockyard,” its precise function remains debated. Rather than focusing solely on

this structure, recent scholarship emphasizes the broader landscape and hydrological context.

The importance of Lothal lies not merely in a single architectural feature but in its integration within a dynamic network of waterways that supported economic exchange across regions.

Conclusion

The evidence demonstrates that the Indus civilization developed a highly adaptive and interconnected trade system that combined inland and maritime routes. The inland water network, particularly the Nal Corridor, played a crucial role in enhancing mobility, reducing risk, and expanding trade opportunities.

Lothal emerges as a central hub within this system, linking resource-rich hinterlands with international trade networks. This integrated approach to transportation and trade underscores the sophistication of Indus economic organization and its ability to harness

natural landscapes for commercial success.

References

- Possehl, G. L. (1976a). *The Indus Civilization*.
- Possehl, G. L. (1976b). *Trade and exchange in the Indus Valley*.
- Rao, S. R. (1979). *Lothal: A Harappan Port Town (1955–62)*. Archaeological Survey of India.
- Wright, R. P. (2010). *The Ancient Indus: Urbanism, Economy, and Society*. Cambridge University Press.
- Recent satellite and geoarchaeological studies on Harappan hydrology and trade networks.

Human settlement and sea level changes along the Sindh coast during the Holocene

Abstract

This article examines human settlement, environmental changes, and sea-level fluctuations along the northern coast of the Arabian Sea, particularly in Sindh and Balochistan, during the Holocene period. The study shows that significant

environmental transformations occurred during the Neolithic period, influencing human habitation and economic strategies. Evidence from Lake Siranda and the Amri culture indicates that reliance on marine resources played a crucial role in early human development. The paper also highlights the urgent need for archaeological preservation due to the destruction of sites caused by modern development.

Introduction

To understand the origins of the Indus Civilization, it is essential to examine the geographical and environmental conditions that preceded it. During the Holocene (beginning approximately 11,700 years ago), significant sea-level changes reshaped coastal landscapes, including the Indus Delta and the Makran coast (Lambeck et al., 2014).

Research by Paolo Biagi provides critical insights into ancient environments and human settlement patterns, particularly in the Las Bela region of Balochistan and around Lake Siranda.

Holocene Sea-Level Changes

During the Holocene, melting glaciers caused global sea levels to rise, pushing coastlines inland (Stanley & Warne, 1994). In Sindh’s coastal regions, areas that are now dry were once submerged or semi-aquatic.

These environmental changes resulted in:

- The formation of lakes and lagoons
- Expansion of mangrove ecosystems
- Creation of favorable conditions for human settlement

Lake Siranda and Early Human Settlement

Lake Siranda, located in the Las Bela region of Balochistan, is a key archaeological site. Evidence suggests human habitation here as early as the 9th millennium BP (around 7000 BCE) (Biagi, 2022).

Archaeological findings include:

- Flint tools
- Shell middens
- Remains of small settlements

These indicate that early inhabitants engaged in:

- Hunting and gathering
- Use of marine resources
- Early forms of exchange or trade

The Amri Culture and Marine Economy

The Amri Culture represents an important pre-Indus cultural phase. Recent research indicates that during the Amri phase (ca. 6000 BP), marine resources were central to subsistence strategies (Biagi, 2022).

Important sites include:

- Tharro Hill
- Makli Hills (Thatta)
- Kalan Kot

Findings such as shell middens and fortified settlements suggest:

- Dependence on marine food resources
- Use of coastal trade routes
- Strategic importance of islands and coastal settlements

Regional and Interregional Connections

Similar archaeological evidence has been found in Khadir Island (Gujarat, India) and the Rann of Kutch, indicating a broader cultural network along the northern Arabian Sea coast (Petraglia & Allchin, 2007).

These connections suggest:

- Regional cultural interaction
- Early maritime exchange networks
- Sharing of technologies and resources

Environmental Transformations and Human Adaptation

Research shows that the Las Bela landscape underwent major changes from the Neolithic to the Bronze Age:

- Lake Siranda became disconnected from the Arabian Sea
- River sedimentation increased
- Aeolian (wind-blown) deposits reshaped the coastline

These processes are comparable to environmental changes observed along the coast of Oman (Biagi, 2022).

Threats to Archaeological Heritage

Unfortunately, many archaeological sites are being destroyed due to:

- Population growth
- Industrial expansion
- Urban development

Earlier discoveries by A. R. Khan and recent findings are increasingly at risk (Khan, 1979; Biagi, 2022).

Conclusion

This study demonstrates that Holocene environmental changes and sea-level fluctuations played a fundamental role in shaping early human settlement and cultural development along the northern Arabian Sea coast. Evidence from Lake Siranda and the Amri culture shows that marine resource utilization was central to early economic systems and likely contributed to the emergence of the Indus Civilization.

Future research should focus on:

- Expanded field investigations
- Application of modern scientific methods
- Urgent preservation of endangered archaeological sites

References

- Biagi, P. (2022). *Holocene people and sea-level changes along the northern coast of the Arabian Sea*

(Pakistan). Archaeological Research Journal.

- Khan, A. R. (1979). *Archaeological discoveries in Sindh*. Karachi: Department of Archaeology.

- Lambeck, K., Rouby, H., Purcell, A., Sun, Y., & Sambridge, M. (2014). Sea level and global ice volumes from the Last Glacial Maximum to the Holocene. *Proceedings of the National Academy of Sciences*, 111(43), 15296–15303.

- Petraglia, M. D., & Allchin, B. (2007). *The evolution and history of human populations in South Asia*. Springer.

- Stanley, D. J., & Warne, A. G. (1994). Worldwide initiation of Holocene marine deltas. *Journal of Coastal Research*, 10(3), 643–655.